

### 2011 ANNUAL REPORT ILLINOIS VEHICLE EMISSION TESTING PROGRAM



**JUNE 2012** 

Illinois Environmental Protection Agency Bureau of Air Division of Mobile Source Programs



#### **EXECUTIVE SUMMARY**

- Motor vehicles are a significant contributor to air pollution, specifically, ground level ozone. Periodic
  mandatory emissions inspection encourages vehicle owners to properly maintain their vehicles, and in
  doing so, reduce the levels of hydrocarbons (HC), carbon monoxide (CO), and oxides of nitrogen
  (NOx) emissions contributing to the formation of ground level ozone.
- The federal Clean Air Act (CAA) requires states to implement and operate vehicle emissions inspection and maintenance (I/M) programs in ozone non-attainment areas. Failure to operate a federally approved I/M program can result in stringent sanctions, including loss of federal highway funding and new source offset sanctions.
- The Illinois Vehicle Emissions Test Program, administered by the Illinois Environmental Protection Agency (Agency) and the Illinois Secretary of State (SOS), started in 1986 with "basic" idle exhaust emission testing of vehicles registered in portions of the Northeastern Illinois and Metro East St. Louis ozone nonattainment areas. In 1999, the program was modified to meet the requirements of the 1990 amendments to the CAA, including the use of the IM240 loaded-mode exhaust emissions test and the gas cap pressure test. In 2004, Illinois replaced the IM240 emissions test with the on-board diagnostic (OBD) test on 1996 and newer vehicles equipped with OBDII technology. On February 1, 2007, Illinois exempted all pre-1996 model year vehicles from further testing and dropped the IM240 test procedure. Also, at this time, all vehicles receiving an OBD test were no longer subject to the gas cap test. Any 1996 or newer vehicle not equipped with OBD technology (most heavy-duty vehicles) were required to pass an idle exhaust and gas cap test.
- Beginning May 1, 2008, the contract to operate a new OBD/Idle inspection station network transferred from Envirotest Illinois, Inc. (EII) to Applus+ Technologies, Inc (Applus+). The new test station network is a hybrid-centralized program which includes a mixture of centralized full-service and OBD-only test stations and decentralized OBD-only test and repair facilities.
- Vehicles registered in the emission test areas are required to be inspected once every two years beginning the fourth model year after they were manufactured. Starting October 1, 2007, the Agency moved from computer matching to registration denial enforcement (SOS denies registration renewal/application if the vehicle has not complied with the emissions test requirement). Vehicles are assigned for testing based on the license plate registration expiration month. Emissions test notices are mailed out to motorists approximately three months prior to registration expiration.
- In 2011, approximately 2.04 million vehicle emission tests were conducted in Illinois. During the reporting period, approximately 7.1% of the vehicles tested failed the initial inspection and required repairs.
- Owners of vehicles failing the inspection received a detailed inspection report containing diagnostic
  information and a booklet containing names and addresses of repair facilities that had demonstrated
  high success in performing emissions repairs. Vehicles passing the emissions inspection were issued
  an emissions compliance certificate indicating the next scheduled assigned test.
- The emissions testing program is a major component of Illinois' ozone air quality control programs for the Northeastern Illinois and Metro-East St. Louis ozone nonattainment areas. In 2011, the program reduced on-highway motor vehicle emissions of ozone forming VOC emissions by 9 tons per day in Northeastern Illinois (9.0 percent reduction) and 1.0 tons per day in Metro-East St. Louis (8.0 percent reduction).

#### 1 BACKGROUND

#### 1.1 Air Quality Problem in Illinois

Since the implementation of comprehensive ambient air quality monitoring in the 1970s, portions of Illinois have exceeded the National Ambient Air Quality Standard (NAAQS) for ozone. Ozone impairs lung function causing chest tightness, coughing and wheezing, especially in the young the elderly and persons suffering from respiratory diseases such as asthma, bronchitis, and emphysema. Research indicates that approximately 3,700 premature deaths and thousands of medical emergencies are linked to exposure to ozone air pollution in the Chicago and Metro-East St. Louis areas each year.

Ozone is not directly emitted but is formed in the atmosphere on warm summer days through chemical reactions primarily between hydrocarbons (HC), oxides of nitrogen (NOx), and carbon monoxide (CO). HC emissions from vehicles are generated from incomplete fuel combustion and fuel evaporation. HC, also known as volatile organic compounds (VOC), include toxic air pollutants such as benzene and formaldehyde both of which are classified as known carcinogens. CO is emitted from a vehicle's exhaust as a result of incomplete fuel combustion. NOx is emitted from vehicles as a natural byproduct of fuel combustion and like HC, is a precursor to the formation of ozone. Illinois did not specifically test vehicles for excessive NOx emissions in 2011 since Northeastern Illinois, under the 1-Hour ozone standard, was granted a NOx control waiver from USEPA in accordance with Section 182(f) of the CAA.

Following adoption of the Clean Air Act (CAA) Amendments of 1990, Illinois' ozone air quality was re-evaluated, and it was determined that the Chicago and Metro-East St. Louis metropolitan areas did not meet the 1-Hour ozone standard and were therefore designated as "nonattainment." Based upon monitored ozone air quality, the Chicago area was classified as a "Severe" ozone nonattainment area and Metro-East St. Louis classified as a "Moderate" area.

In 2004, the USEPA designated both the Chicago and Metro-East Illinois areas as "moderate" ozone nonattainment areas under the newly established 1997 eight-hour ozone standard. Then in 2007 the Illinois EPA requested that USEPA find that the Chicago nonattainment area attained the revoked 1-hour ozone National Ambient Air Quality Standard (NAAQS). USEPA made this determination on December 30, 2008 (73 FR 79652). In addition, the Illinois EPA has submitted a redesignation request to attainment for ozone under the 8-hour standard in Chicago and the Metro-East nonattainment areas. The data submitted by the Illinois EPA shows that the Chicago and Metro-East St. Louis nonattainment areas attained the 1997 8-hour ozone standard for the years 2008 through 2010. On December 22, 2011, the USEPA proposed to approve the redesignation request for the Illinois portion of the St. Louis, MO-IL nonattainment area to attainment for the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) (76 FR 79579). On February 9, 2012, the USEPA proposed to approve the redesignation request for the Illinois portion of the Chicago-Gary-Lake Illinois-Indiana ozone nonattainment area to attainment for the 1997 8-hour ozone NAAQS (77 FR 6743).

In 2008, the USEPA adopted a more stringent 8-hour ozone NAAQS reducing the standard from 0.08 ppm to 0.075 ppm . For the years 2008, 2009, and 2010, Chicago area air quality monitoring data shows attainment of the 2008 standard. However, for the period 2009, 2010, and 2011, there was a violation of the 2008 8-hour ozone standard at one monitor located in Lake

County, IL. The design value at this monitor is 0.076 ppm, 0.001ppb over the 2008 8-hour NAAQS. USEPA recently proposed to classify the greater Chicago area will be classified as a marginal nonattainment area (77 FR 8211).

Based on ambient air monitoring concentrations collected during the years 2008, 2009, and 2010 in the St. Louis, MO-IL nonattainment area, USEPA proposed that the area be designated as nonattainment for the 2008 8-hour ozone NAAQS. Ambient air quality monitoring in the Illinois portion (Madison, Monroe, and St. Clair Counties) of the St. Louis, MO-IL nonattainment area reflect that the highest three year design value measured was 0.072 ppm for Madison County. Thus, taken alone, monitors in the Illinois portion of the region indicate it attained the 2008 8-hour ozone NAAQS. However, the West Alton monitor located in St. Charles County had a three year design value of 0.078 ppm leading to the designation of the entire region as nonattainment.

#### 1.2 Motor Vehicle Contribution

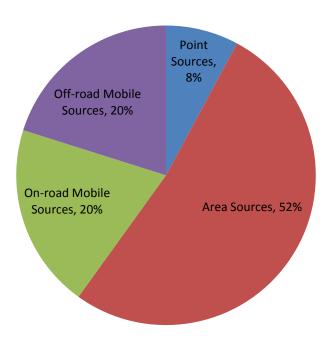
Based on the most recent emissions inventory for Illinois, motor vehicles are a significant source of HC and CO emissions, contributing 20 percent of the total HC emissions and 40 percent of the total CO emissions in Northeastern Illinois. Figure 1.1 shows the distribution of HC emissions by major category.

Figure 1.1

NORTHEASTERN ILLINOIS OZONE

NONATTAINMENT AREA

2008 VOC (TONS PER DAY)



On-road mobile sources include cars, trucks, buses and motorcycles, while non-road mobile sources are made up of aircraft, locomotive, construction, industrial and lawn and garden equipment. Point sources are larger industrial or manufacturing processes, which have received a permit to operate from the Agency. Area sources include small businesses such as gas stations and dry cleaners and include estimates of emissions from the use of paints and other consumer products.

During the 1990s, the United States Environmental Protection Agency (USEPA) adopted stricter motor vehicle emissions standards for new vehicles, especially targeting HC and CO emissions. However, due to the deterioration of the motor vehicle engine and emissions control system over time, the "typical" vehicle on the road emits three to four times the pollution generated by new cars. A significant fraction of these excess emissions are a direct result of the failure of owners to properly maintain their vehicles, or to otherwise ensure that emissions control systems are operating properly. Proper maintenance of vehicles and emissions controls reduces emissions, improves vehicle performance and fuel efficiency, and prolongs vehicle life. To encourage owners to maintain their vehicles, vehicle emissions I/M programs were made a required element of air quality programs in either ozone or CO nonattainment areas. In compliance with the CAA and applicable federal regulations, the Illinois Enhanced I/M Program identifies cars and trucks significantly exceeding federal emissions standards, and through their repair, reduces emissions and improves air quality.

#### 1.3 Clean Air Act Emissions Testing Requirements

The CAA requires the establishment of either "Basic" or "Enhanced" I/M programs in nonattainment areas, depending on the severity of the nonattainment problem. States are allowed to propose and implement their vehicle testing programs, so long as they meet CAA requirements, and the program is approved by the USEPA. The CAA provides stringent sanctions in the event a state does not meet its obligations; including the imposition of a federally-designed and implemented vehicle emissions testing program, 2 for 1 new source offset sanctions, and the loss of a state's federal highway funding. Enhanced I/M was required in Northeastern Illinois due to the "Severe" nonattainment classification of the area. Basic I/M was required in Metro-East St. Louis based upon the "Moderate" classification. With the adoption of the 8-Hour ozone standard, both Chicago and Metro-East were reclassified as "Moderate". Given the transition from exhaust emissions testing to OBD, the difference between "Basic" and "Enhanced" I/M programs has blurred and the current Illinois program complies with both standards.

#### 2 ILLINOIS' VEHICLE EMISSIONS TESTING PROGRAM

#### 2.1 History

**Initial "Basic" I/M Program** – In June 1984, the Illinois General Assembly passed the Vehicle Emissions Inspection Law (625ILCS 5/13A), authorizing the implementation of the vehicle emissions inspection program. Basic I/M was performed in Illinois from May 1986 to February1999. The program consisted of a simple idle exhaust test designed to identify gross emitters (i.e., heavily polluting vehicles). This test, conducted annually on vehicles registered within specified test areas, met the federal standards in effect at the time, and was appropriate for the types of vehicles then in production.

In 1992, in response to a need for additional emission reductions, the program was expanded geographically to include more of the Chicago nonattainment area and add emission component checks (for tampering/removal of catalytic converters, gas caps and fuel inlet restrictors). The combination of the exhaust test and emission control component verification allowed inspectors to better identify which vehicles needed to be repaired to reduce emissions of ozone-forming pollutants. Toward the end of the basic program, gas cap pressure testing was added to identify vehicles with either leaking or missing gas caps. This new test procedure targeted VOC emissions from vehicles with malfunctioning evaporative control systems.

**Enhanced I/M Program** - In February 1999, the Agency implemented the Illinois Enhanced I/M Program, consisting of significant upgrades to the program designed to bring Illinois into compliance with the 1990 amendments to the federal CAA. These improvements included:

- Incorporating new test procedures, such as the IM240 transient mode exhaust test, the gas cap pressure test, and the vehicle on-board diagnostic (OBD) system test.
- Changing the test frequency to require vehicles to be tested biennially (once every two years).
- Expanding the geographic area of program coverage to include all federally-required urbanized portions of the ozone non-attainment areas.
- Changing waiver requirements to introduce the \$450 minimum repair expenditure requirements of the federal CAA.
- Changing the model year coverage to increase the age in which vehicles were first required to be tested from two to four years.

Through January 31, 2007, the program was authorized by the Illinois Vehicle Emissions Inspection Law of 1995 (625 ILCS 5/13B) and was operated under the emissions standards adopted by the Illinois Pollution Control Board (35 Ill. Adm. Code 240), and pursuant to Agency procedures (35 Ill. Adm. Code 276).

The Illinois EPA awarded a contract to Envirotest Illinois, Inc. (EII) to design, build and operate the enhanced inspection station network through April 30, 2008. EII is a subsidiary of Environmental Systems Products of East Granby, Connecticut.

**Current I/M Program** – The program was recently reauthorized by the "Vehicle Emissions Inspection Law of 2005" (625 ILCS 5/13C). Significant changes have been made to the program that include:

- Beginning February 1, 2007:
  - i) Model year 1995 and earlier models that were in compliance with the Illinois Vehicle Emissions Inspection Law of 2005 were exempted from further vehicle emissions testing. All vehicles in this category had been required to pass an idle exhaust and gas cap pressure test.
  - ii) The IM240 test procedure was eliminated for all vehicles.
  - iii) Gas Cap pressure testing was no longer required for 1996 and newer model year light duty vehicles and trucks that received a successful OBD inspection. The gas cap test is still required for model year 1996 and newer heavy-duty trucks and 1996 and newer light-duty vehicles and trucks that are forced to a fallback idle test.
  - iv) The "Key on Engine off" (KOEO) test, or bulb check was eliminated from the OBD test procedure.
- Beginning January 1, 2008, the enforcement mechanism was converted from the
  computer-matching system to a vehicle registration denial based system. In preparation
  for this change, in October 2006, the Illinois Vehicle Emissions Test program began
  assigning vehicles that successfully complete the emissions test requirement based on the
  registration expiration date not the previous assign date. Motorists received test
  notification based on the registration expiration date beginning with the October 2007
  mailing list.

In addition, beginning May 1, 2008, the contract to operate the inspection station network transferred from EII to Applus+ Technologies, Inc (Applus+) of Chicago in June 2007. The new test station network is a hybrid-centralized program and consists of the following:

- 12 Centralized Full-Service test-only stations (9 in Northeastern Illinois, 3 in Metro-East St. Louis) maintained and operated by Applus+. These stations are equipped to perform all required test procedures (i.e., OBD, Idle Exhaust and Gas Cap Pressure).
- 5 Centralized OBD-Only test-only stations maintained and operated by Applus+ in Northeastern Illinois. These stations are only equipped to perform the OBD test procedure.
- 36 Decentralized OBD-Only test lanes (33 in Northeastern Illinois, 3 in Metro-East St. Louis) located in and operated by either Meineke Care Centers, Inc., Car-X Auto Service Centers, or full service automotive dealerships. These stations are only equipped to perform the OBD test procedure.
- 3 Self-Serve OBD-Only Test Kiosks (2 in Northeastern Illinois, 1 in Metro-East St. Louis). This pilot test kiosk allows a motorist to perform the OBD test procedure on a vehicle without the need of an inspector. All three kiosks opened to the public on February 22, 2010.

**Future I/M Program** – Amendments to the "Vehicle Emissions Inspection Law of 2005" (625 ILCS 5/13C) were signed into law on July 14, 2011 ((Illinois Public Act ("P.A.") No. 97-0106)). These amendments contain significant changes to the program that, beginning February 1, 2012, include:

• Eliminating the steady-state idle mode exhaust test

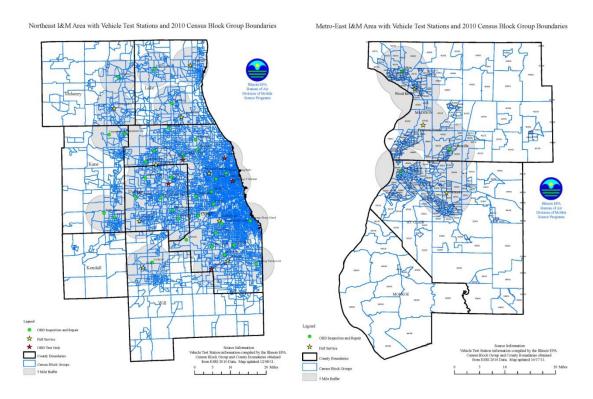
- Eliminating the evaporative system integrity test (also known as the gas cap test).
- Exempting pre-2007 model year heavy-duty vehicles with gross vehicle weight rating (GVWR) between 8,501 and 14,000 pounds.
- Exempting all heavy-duty vehicles with GVWR greater than 14,000 pounds.
- Adding a visual inspection test for vehicles where OBD testing is not possible due to the vehicle's design.

#### 2.2 Enhanced I/M Program Description

**Test Areas and Network** - In Illinois, vehicle emissions testing is limited to vehicles registered within the urbanized portions of the Chicago and Metro-East St. Louis ozone non-attainment areas. In Chicago, this includes Cook, Du Page and Lake Counties; and portions of McHenry, Kane, Will and Kendall Counties. In the Metro-East St. Louis area, this includes portions of Madison, St. Clair and Monroe Counties. Testing areas are defined by ZIP Code and correspond more or less to the Urbanized Areas required by the CAA to be covered by an I/M program.

As stated in Section 2.1, beginning May 1, 2008 the test-only centralized network was converted to a hybrid centralized configuration with 17 Centralized test-only facilities (14 in Chicago – 3 in Metro-East St. Louis) and 36 decentralized test and repair stations (33 in Chicago – 3 in Metro-East St. Louis, See Figures 2.1 and 2.2).

Figure 2.1 Figure 2.2



**Test Requirements and Procedures** - The purpose of the enhanced vehicle emissions test is to identify vehicles that emit excessive amounts of ozone precursors HC, CO and NOx. Once these vehicles are identified, vehicle owners are required to make repairs that will reduce the amount of exhaust and/or evaporative emissions to within acceptable levels.

Until February 1999, the Illinois I/M program relied primarily on the use of the idle exhaust test to identify gross emitting vehicles. The idle test consists of measuring exhaust HC and CO while the vehicle is idling. Idle exhaust testing evolved from engine tune-up procedures used on late1960s and 1970s vehicles. On the carburetor-equipped vehicles of that era, repairs performed to reduce idle exhaust concentrations generally produced similar effects during road use.

However, the introduction of sophisticated emissions and engine controls, particularly the advent of computer controls, limited the effectiveness of idle tests. Beginning with the 1996 model year, vehicles have been required by USEPA to be equipped with second-generation on-board diagnostics systems (OBD-II). These systems are designed to monitor major engine and emissions control systems continuously during vehicle operation, alerting the driver of malfunctions causing or contributing to exhaust or evaporative emissions exceeding federal standards. The systems also capture and store information useful to repair technicians in diagnosing and repairing the problem identified. The OBD I/M test consists of determining if the vehicle's OBD system is properly functioning, and retrieving data stored in the OBD system's computer memory. If it is determined that the vehicle's malfunction indicator lamp (MIL) is illuminated and diagnostic trouble codes are present, or if the OBD system is missing, damaged, or inoperative, the vehicle will fail the test. OBD I/M testing is a required component of all I/M programs and is designed to replace the traditional exhaust tests on 1996 and newer vehicles. Most states have fully integrated OBD testing into their I/M programs. In Illinois, the OBD I/M test was phased-in over an 18 month period, with full implementation completed in January 2004.

Starting February 1, 2007, most 1995 and earlier model year vehicles were exempted from further emissions testing and the IM240 test procedure was eliminated. With the aging of the vehicle fleet, it was decided that the State's resources could be better utilized by focusing on the largest portion of the fleet. All 1996 and newer model year light-duty vehicles and trucks that are OBDII equipped are subject to the OBD inspection. All 1996 and newer heavy-duty vehicles not meeting the OBDII requirement are required to pass an idle exhaust and gas cap pressure test.

**Test Frequency and Vehicles Subject to Testing** – Illinois operates a biennial vehicle emissions test program, meaning a vehicle is required to be inspected every 2 years on a schedule that begins in the fourth calendar year after the vehicle model year. Prior to February 1, 2007, the emissions test requirement applied to 1968 and newer model year gasoline-powered motor vehicles registered in the test area, including passenger cars, sport utility vehicles (SUV's), light and heavy-duty trucks and buses. However, starting February 1, 2007, all pre-1996 model year vehicles that were currently in compliance with the Illinois Vehicle Emissions Inspection Law of 2005 were exempted from further emissions testing. In addition, all diesel-powered vehicles, show cars, ceremonial vehicles, and vehicles registered as antiques are exempt from testing.

On Board Diagnostic Testing - The test consists of connecting an OBD system scan tool to the standardized connector port under the dash. With the engine running, the scan tool accesses the

on-board computer and retrieves specific information from the vehicle. This includes an indication of whether or not the MIL is commanded to be illuminated, the number of diagnostic trouble codes (DTC) stored in the system, the DTC codes, and the operational status of up to eleven systems monitored by the OBD system.

Prior to the scan, the inspector performed a "bulb check" of the MIL to ensure that it is operating properly. Beginning February 1, 2007, the "bulb check" was no longer a required part of the Illinois OBD test procedure, except in cases where, due to vehicle design an OBD test cannot be conducted due to communication issues.

Beginning October 15, 2009, vehicles with known OBD communication issues receive a fallback bulb/MIL check. Vehicles pass this fallback inspection if the check engine light illuminates during a key-on-engine-off position and does not illuminate during a key-on-engine-on position. During the 2011 reporting period, this fallback procedure was only available for the 1997 Acura 2.5 TL, 2000 Nissan Altima, and the 2006 Mercedes C230/C280.

**Idle Exhaust Testing** – Prior to February 1, 2007, all model year 1968 through 1980 vehicles, and heavy-duty trucks (regardless of model year) received an idle exhaust test. This test was also used on 1981 and newer vehicles that could not be tested on the dynamometer (i.e. vehicles with full-time four-wheel drive and/or traction control).

Beginning February 1, 2007, most pre-1996 model year vehicles were exempted from the vehicle emissions testing requirement. Therefore, the idle exhaust test will only be used for the following vehicles:

- 1996 and newer heavy-duty vehicles that are not OBDII compliant;
- 1996 and newer light-duty vehicles and Trucks that are forced to a fallback exhaust test; and,
- Pre-1996 model year vehicles that had failed to achieve compliance before February 1, 2007.

The test is performed while the vehicle is idling. A sampling probe is placed in the tailpipe to measure the concentrations of hydrocarbons and carbon monoxide in the vehicle's exhaust. Measured values are compared against idle emissions standards established for the model year and type of vehicle tested. Vehicles are given two chances to pass the exhaust test. If the vehicle fails the initial test, the vehicle is preconditioned (accelerated to 2500 RPM in neutral). The vehicle is then returned to idle and a second measurement is taken.

As mentioned above, this test will be eliminated starting February 1, 2012, and all vehicles subject to this test procedure will be exempted from further vehicle emissions testing.

Gas Cap Pressure Test Testing – The gas cap pressure test consists of removing the cap from the vehicle and using a pressure tester to ensure that the cap does not leak. This test was required on all 1968 and newer model year vehicles equipped with evaporative emissions control systems. Beginning February 1, 2007, the gas cap pressure test was no longer required for 1996 and newer model year light duty vehicles and trucks that receive a successful OBD inspection.

As mentioned above, this test will be eliminated starting February 1, 2012, and all vehicles subject to this test procedure will be exempted from further vehicle emissions testing.

#### 3 OPERATING STATISTICS

#### 3.1 Testing Volumes and Failure Rates

During the 2011 reporting period, the Agency conducted approximately 2 million vehicle emissions tests. Annual test volumes since the implementation of the enhanced program are shown in Table 3.1. Test volumes for calendar year 2007 and beyond have decreased based on changes made to the test program as a result of the Vehicle Emissions Inspection Law of 2005. The primary change effecting test volumes was the exempting of all complying pre-1996 model year vehicles.

Table 3.2 provides additional details on initial test volumes, including the numbers of passing and failing tests and the resulting failure rates. It is important to note that the current rates remain significantly below projected initial failure rates of 18-20%.

The distribution of initial failures by vehicle model year for the 2010-2011 test cycle is shown in Figure 3.1 on the following page.

In calendar year 2011, 6.9% of vehicles failing the initial test failed for excessive exhaust/OBD and 7.7% failed the gas cap test.

TABLE 3.1 Illinois Annual Test Volumes 1999-2011

filliois Amiuai Test Volumes 1999-2011					
Year	Initial Vehicle Tests	Retests <sup>3</sup>	Total Tests		
1999 <sup>1</sup>	1,559,253	143,522	1,702,775		
2000	1,502,380	118,048	1,620,428		
2001 <sup>2</sup>	1,729,590	242,143	1,971,733		
2002	1,699,865	209,352	1,909,217		
2003	1,838,138	186,917	2,025,055		
2004	1,790,947	196,008	1,986,955		
2005	1,858,975	214,444	2,073,443		
2006	1,916,808	198,709	2,115,517		
2007	1,478,718	117,306	1,596,024		
2008	1,542,387	105,654	1,648,041		
2009	1,654,770	109,036	1,763,806		
2010	1,815,620	112,954	1,928,574		
2011	1,911,566	130,658	2,042,224		

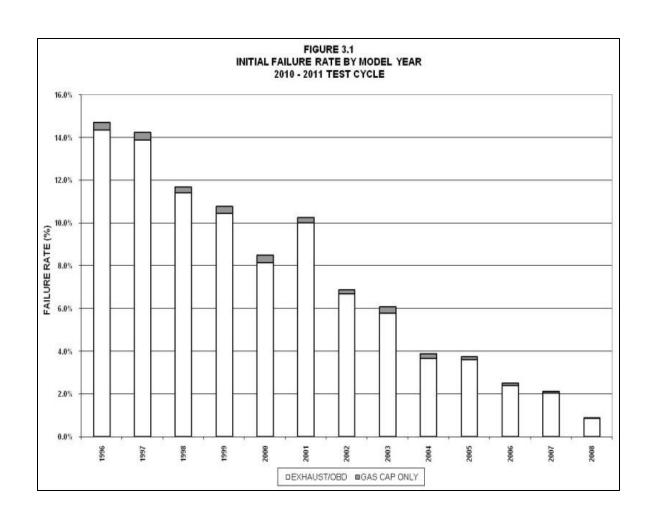
- 1. Basic program during 1/99, Enhanced 2/99-12/99.
- 2. Final IM240 exhaust standards beginning 2/01.
- 3. All Retests including gas cap only retests
- Pre 1996 MY Vehicles no longer assigned for testing and IM240 dropped 2/07.

TABLE 3.2 Initial Test Failure Rates

Year	Initial	Initial	Initial	Fail
rear	Tests	Passes	Fails	Rate %
1999 <sup>1</sup>	1,559,253	1,453,312	150,831	9.7
2000	1,502,380	1,411,731	127,679	8.5
2001 <sup>2</sup>	1,729,590	1,529,908	233,705	13.5
2002	1,699,865	1,515,909	218,766	12.9
2003	1,838,138	1,675,440	191,286	10.4
2004	1,790,947	1,609,815	221,485	12.4
2005	1,858,975	1,694,213	164,762	8.9
2006	1,916,808	1,757,058	159,750	8.3
$2007^3$	1,478,718	1,378,196	100,522	6.8
2008	1,542,387	1,448,425	93,962	6.1
2009	1,654,770	1,548,846	105,924	6.4
2010	1,815,620	1,695,430	120,190	6.6
2011	1,911,566	1,774,993	136,573	7.1

- 1. Basic program during 1/99, enhanced 2/99-12/99.
- 2. Final IM240 exhaust standards beginning 2/01.
- 3. Pre 1996 MY Vehicles no longer assigned for testing and IM240 dropped 2/07.

Of vehicles failing the exhaust emissions test (Idle), 98% exceeded HC emission limits, and 19% exceeded CO limits.



#### 3.2 Emission Reductions

Estimating overall program effectiveness requires the use of sophisticated computer modeling techniques to quantify the effect of the program on region-wide VOC and CO emissions from on-road sources. The Agency utilized the USEPA MOVES series of on-highway vehicle

estimation models to generate Chicago and Metro-East St. Louis area-specific emission factors. These factors (typical or average VOC, CO and NOx emissions rates expressed in grams per mile) were applied to estimates of daily vehicle miles traveled (VMT) to calculate the total emissions generated in the nonattainment areas. Inputs to the model include area-specific data describing ambient conditions (e.g.,

#### TABLE 3.3 ENHANCED I/M EMISSIONS REDUCTIONS CHICAGO NONATTAINMENT AREA

YEAR	VOC (TPD)	VOC (%)	CO (TPD)	CO (%)	NOX (TPD)	NOX (%)
2007	12.9	8	141.3	6	14.6	3
2008	12.1	9	130.0	5	13.9	3
2009	11.1	9	119.7	6	14.2	4
2010	10.2	10	111.9	5	13.2	4
2011	9.0	9	104.0	5	12.7	4

MOVES2010a

temperatures, humidity), fuel composition, traffic composition (e.g., VMT mix by vehicle type and age), vehicle speed, and inputs defining the design of the I/M program.

Current estimates of Illinois I/M program VOC emission reductions have been made using the MOVES2010a version of the model. Table 3.3 summarizes emission reduction estimates for the Chicago Nonattainment area. As shown, the current Illinois program reduced VOC emissions in 2011 by 9.0 tons per day. Table 3.4 summarizes estimates for Metro-East St. Louis nonattainment area where VOC

# TABLE 3.4 ENHANCED I/M EMISSIONS REDUCTIONS METRO-EAST ST. LOUIS NONATTAINMENT AREA

YEAR	VOC (TPD)	VOC (%)	CO (TPD)	CO (%)	NOX (TPD)	NOX (%)
2007	1.5	8	21.0	6	1.6	3
2008	1.2	7	19.2	6	1.4	3
2009	1.1	8	17.8	6	1.3	3
2010	1.1	8	16.7	6	1.4	3
2011	1.0	8	15.6	6	1.4	4

MOVES2010a

emissions were reduced by 1.0 ton per day in 2011.

#### 3.3 Administrative Actions

Waivers - In cases where vehicles cannot be brought into compliance after reasonable attempts

are made to repair them, both the Vehicle Inspection Law of 1995 and 2005 provide for the issuance of waivers if certain criteria are met. Federal enhanced I/M requirements specify that waivers cannot be granted unless a minimum of \$450 in emissions-related repairs are performed on the vehicle. Additional requirements also apply to ensure the vehicle emissions components have not been deliberately removed or tampered with, and that repairs have been performed by professional repair technicians. Table 3.5 summarizes waiver issuance activity since implementation of the enhanced program. The number of waivers issued and the waiver rates for each year compare favorably with the 3% maximum rate mandated in the USEPA enhanced performance standard.

TABLE 5.5						
Calendar	WAIVER DATA Calendar Waivers Waiver					
Year	Issued	Rate (%) <sup>1</sup>				
1999	2,771	2.0				
2000	2,529	2.0				
2001	5,172	2.2				
2002	4,864	2.2				
2003	4,081	2.1				
2004	3,219	1.5				
2005	3,031	1.8				
2006	2,706	1.7				
2007	2,348	2.3				
2008	2,218	2.5				
2009	2,094	2.1				
2010	2.180	1 Q				

TABLE 2 5

3.024

2011

#### **Economic Hardship Compliances –**

In cases where vehicle owners cannot afford the cost of repairs, an Economic Hardship Compliance is available. Low-income owners can petition the Agency for a one-year extension of the test-by date. In order to qualify, the owners must meet specified income requirements and provide written estimates of the cost of repair. Table 3.6 summarizes the numbers of economic hardship compliances issued since 1999.

**Temporary Extensions** – Prior to the implementation of the Vehicle Emissions Inspection Law of 2005, the Illinois program also provided motorists needing additional time to comply, with a four-month Temporary Extension. This extension

TABLE 3.6 HARDSHIP COMPLIANCES ISSUED

Calendar	Extensions
Year	Issued
1999	163
2000	315
2001	300
2002	345
2003	235
2004	307
2005	263
2006	221
2007	164
2008	231
2009	406
2010	668
2011	1,155

was most often issued for vehicles that were inoperable, were awaiting repairs or parts, or were temporarily being used outside of the emissions test area.

This option is no longer available to motorists whose vehicles are subject to the registration denial enforcement mechanism. Instead, the SOS has implemented a policy which allows the motorist to extend the vehicle's registration expiration date by up to six months (up to four months starting in April 2012). SOS changes the motorist \$6.50 for each month of extension. This policy was implemented in December of 2008.

<sup>1.</sup> Expressed as a percent of initial test failures.

#### 4 CUSTOMER SERVICE

#### 4.1 Motorist Convenience/Wait times

Since the inception of the emissions test program in 1986, the Agency has strived to provide vehicle owners with a high level of customer service and convenience in all aspects of the program. The network of inspection stations has been developed to provide for facilities reasonably close to work or home, and was sized to minimize the time required for vehicle testing. The Illinois EPA requires that the test contractor provide a station network that ensures that the average monthly wait time at any station does not exceed 15 minutes.

While wait times vary significantly by station, month and day of week, on average, the wait times experienced during the last several years have been well below prescribed minimums.

Table 4.1 lists network-wide annual average wait times for 1999 - 2011.

The Illinois test system has been designed to continuously monitor the wait time at each station, providing motorists with current estimated wait time they would likely experience prior to testing. Actual wait times are measured for each vehicle tested and the current estimated wait computed for each station. Estimated wait times are displayed on a monument sign at the station entrance and are available on the Agency website (http://www.epa.state.il.us/air/vim/),

The current wait time is also available through the toll-free wait time hotlines for all test stations. Motorists can access current wait times TABLE 4.1 ANNUAL AVERAGE WAIT TIME

Calendar Year	Network Average Wait (Minutes)
1999	6.5
2000	7.6
2001	9.7
2002	7.8
2003	7.1
2004	6.8
2005	7.4
2006	6.9
2007	4.3
2008	5.8
2009	5.2
2010	5.8
2011	6.6

by dialing a toll-free telephone number for each test station, which are listed in the vehicle emission test notices.

Finally, the Agency website (http://www.epa.state.il.us/air/vim/queue-cameras.html) provides a link to live cameras at each centralized test station, which shows the current queue length.

#### 4.2 Public Information/Motorist Assistance

The Agency, SOS, and the test contractor have staff available during regular business hours to help vehicle owners with questions or problems encountered with the test program. The test contractor maintains a customer service office in each full service test facility (9 in Chicago and 3 in Metro-East), staffed by trained customer service representatives to assist in explaining test requirements and procedures, and to perform gas cap retests and conduct waiver inspections.

The Agency also maintains telephone hot lines with phone staff trained in all facets of program operation. They provide general information (i.e. facility locations, hours of operation, etc.),

provide directions to the test stations, and advise motorists of how to proceed if there are errors in registration or test data, or if they are unable to have the vehicle tested. The Agency also maintains a website (http://www.epa.state.il.us/air/vim/) containing information about the program.

#### 4.3 Enforcement/Notification

Prior to 2008, Illinois utilized a "computer-matching" enforcement system. The Agency relied on registration data provided by the SOS to identify vehicles required to be tested in a given year. The Agency then randomly assigned the vehicle a test month throughout the year. The Vehicle Emissions Inspection Law of 1995 established a four-month test period in which the owner may have the vehicle tested prior to the Agency notifying the SOS to initiate enforcement action. Non-compliance resulted in the suspension of the vehicle owner's driver's license, the vehicle registration, or both. Prior to the first day of the assigned test month, the Agency mailed a test notice to the owner/lessee of the vehicle.

As noted in Section 2.1, Illinois converted from the computer-matching enforcement system to a registration denial based enforcement system, beginning January 1, 2008. This change was mandated by the Vehicle Emissions Inspection Law of 2005 and requires any owner of a vehicle subject to emissions inspection to have the vehicle inspected and provide proof of compliance in order to obtain or renew a vehicle registration.

Beginning in the last quarter of 2007, vehicles with January 2008 registration expiration dates or later received initial test notices stating that the vehicle's registration renewal would be denied unless the vehicle had complied with the Vehicle Emissions Inspection Law of 2005. In addition, at the end of January 2008, any outstanding vehicle registration subject to suspension under the computer-matching enforcement mechanism was transferred into the registration denial system. This meant that registration renewal application for any vehicle in this category would be denied without demonstration of compliance with the Vehicle Inspection Law of 2005. Therefore, there were no driver' license suspensions or registration suspensions for Calendar Year 2011.

The summary of all initial test and notices for Calendar Year 2011 is contained in Table 4.2.

Table 4.2				
<b>Emission Test Notice Volumes</b>				
Calendar Year 2011				

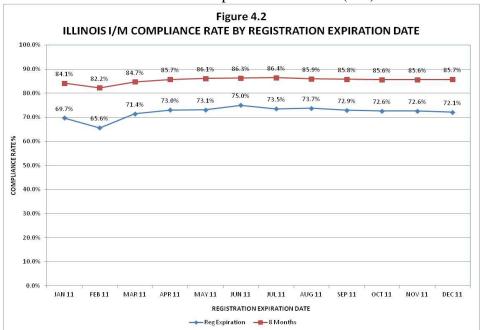
Notice	2011 Total	2011 Monthly Average
Initial Notice	2,275,648	189,637
IEPA Warning Notice <sup>1</sup>	0	0
IEPA Request SOS DL/Reg Suspension <sup>2</sup>	0	0

- 1. Last IEPA Warning Notice mailing July 2007
- 2. Last SOS Suspension Request June 2007

#### 4.4 Compliance Rates

The Agency monitors vehicle compliance rates on a monthly basis. This is done to ensure that the Illinois I/M program is meeting federal requirements and design objectives necessary to achieve emission reductions committed to in the State Implementation Plan (SIP). The

compliance rate is determined for each assigned month grouping<sup>1</sup> by comparing the number of vehicles in each group that have complied (i.e., passed the test or received a waiver) with the number of all active vehicles (i.e., passed, waived or still outstanding). Figure 4.2 contains compliance rates by "Reg Expiration" (i.e., vehicles that



achieve compliance prior to the registration expiration (registration denial)), and "8 Months" (i.e., 8 months after vehicle was originally notified of the requirement to test).

Starting May 1, 2008 under the new testing contract with Applus, preprinted VIRs are no longer used as was the previous case. The VIR barcode is generated by the test equipment at the time of the test and printed on the blank VIR sheet.

#### 4.5 Repair Industry Monitoring and Reporting/Outreach

A critical component of enhanced I/M programs is the collection and evaluation of information on repairs made to failing vehicles. In order to qualify for a retest, motorists are required to provide information on the repairs that were performed. The information provided is then combined with retest results to assess the effectiveness of repairs being performed. On a quarterly basis, the test contractor publishes the Repair Shop Report Card that provides motorists with names and addresses of repair shops that have demonstrated a high level of competency in performing emissions repairs. Each shop is graded based upon whether the vehicle passes, fails or is rejected for readiness during the retest following repair.

The letter grade for each shop is updated quarterly and is based on the success rate of the shop in fixing a vehicle. Shops that repair at least five vehicles with emissions failures during the past six months and achieve at least a 75 percent success rate are included in the report card. The letter grade is calculated by dividing the number of successful repairs by the total repairs

<sup>&</sup>lt;sup>1</sup> All vehicles scheduled for testing in a calendar month.

performed by the shop. The vehicle must pass the retest following the repair to be counted as a successful repair. Any vehicle that fails or is rejected for OBD readiness following a repair will not be counted as a successful repair. The repair shop grade will be based on the success rate (93-100% = A, 84-92% = B, 75-83% = C).

All owners of vehicles failing the initial test receive the Report Card to help them make informed choices about where to have emissions-related repairs performed. The Report Card data is also available on the Illinois EPA website at www.epa.state.il.us/air/vim/reportcard.html. Additionally, a complete list of all repair shops performing emissions repairs, regardless of grade, is available for reference at each inspection facility.

In a continuing effort to improve the quality of repairs being made to failing vehicles, the Agency has implemented a repair industry outreach program. Several times per year, the Agency conducts and sponsors Enhanced I/M training seminars for repair technicians on exhaust and OBD testing and repair.

#### **4.6 Vehicle Damage Claims Process**

The actual number of damage claims submitted is extremely small in comparison to the numbers

of vehicles tested. Table 4.3 shows the annual number and rate of claims since enhanced testing began in 1999. In 2011, there were 85 claims filed, or 0.004% percent of all vehicles tested (4 claims per 100,000 vehicles tested). As shown, the rate of claims has decreased significantly, in part due to the phase-in of less-intrusive OBD testing in 2002, and more recently, the elimination of the IM240 test. Most claims were related to minor damage (e.g., dents, scratches, scuffed tires) and were settled with test facility management providing a purchase order for repair on the spot.

Table 4.3 Vehicle Damage Claims						
Year Claims Rate (%)						
1999	1,366	0.08				
2000	1,043	0.07				
2001	1,428	0.07				
2002	1,003	0.05				
2003	630	0.03				
2004	429	0.02				
2005	339	0.02				
2006	121	0.01				
2007	51	0.003				
2008	54	0.003				
2009	99	0.005				
2010	82	0.004				
2011	85	0.004				

On rare occasions, damage claims cannot be handled at the test facility level and require third-party evaluation. These major claims are handled by a three-step process:

- 1) The motorist files a claim at the station;
- 2) The claim is thoroughly investigated, with some claims involving an independent third-party evaluation; and,
- 3) Either payment is offered or the claim is denied.

The independent third-party evaluation is handled by over 30 Claim Evaluation Centers (CECs), using ASE<sup>2</sup> certified technicians who are trained in testing and repair. These CECs render an

<sup>2</sup> ASE (Automotive Service Excellence) is a nationally recognized non-profit organization performing voluntary testing and certification of automotive technicians.

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opinion on the likely cause of damage based on established facts and professional opinion. Owners not satisfied with the resolution of the claim may pursue the matter through the Better Business Bureau's binding arbitration process or in circuit court. Owners may also petition the Agency to review the adequacy and completeness of the contractor's proposed resolution to a claim. During the 2011 reporting period, only two claims were referred to CECs.

#### **5 QUALITY ASSURANCE**

Contractor oversight is achieved utilizing the following quality assurance functions:

#### 5.1 Overt Audits

Overt audits primarily consist of Testing Procedure Monitoring (TPM) performed by the State Inspectors, and equipment audits performed by the Quality Assurance Auditors.

**TPM** – Testing Procedure Monitoring is an evaluation of individual vehicle tests performed by the lane attendant. The audit form was developed utilizing Part 276, Title 35 of the Illinois Code, the Enhanced I/M Request for Proposal (RFP), and station and lane operating manuals that are part of the contract documentation. The audits help ensure that proper testing procedure is consistently utilized at all the testing stations. During the 2011 reporting period, the State Inspectors performed 12 audits daily. Results were discussed with Station Management and entered in the TPM database.

**Equipment Audits** – The IM97 gas audits are the primary equipment audits. The gas audits simulate an exhaust test with known concentrations of a tri-blend gas introduced into the analyzer system. The readings posted by the analyzer are compared to the known values of the audit gas. If any of the readings are outside of the tolerance range of the audit gas, the lane is closed to further vehicular testing until the analyzer is repaired and passes a State retest. During the 2011 period, every testing lane received at least one IM97 gas audits. Additional equipment audits address the pressure decay and/or leak flow gas cap testing systems. For a complete summary of the equipment audits conducted in 2011, refer to Appendix C and D.

Starting in October 2009, the Quality Assurance Auditors began auditing the OBD analyzers with verification testers. The audit was modeled after the guidance provided in the document "U.S. EPA Steady State and Transient Testing Equipment Audit Guidance." In addition, they expanded the scope of the audit and have tested most lanes using six different protocols.

As a result of this new OBD analyzer audit, an OBD protocol issue was discovered in one of the test lanes at the Lincolnshire station. The OBD analyzer was unable to communicate with the CAN protocol. The test contractor replaced the analyzer cable which rectified the problem.

Finally, the Quality Assurance Auditors also review the contractor's Quality Control/Maintenance books on a routine basis. These books contain the records of required calibrations and all equipment maintenance performed by the contractor. Summaries of the reviews are maintained by QA.

#### 5.2 Covert Audits

Covert audits were performed by state inspectors to verify whether contractor personnel (lane inspectors) followed established test procedures when performing a test. Two unique vehicles with regular license plates were used for these audits, including one vehicle with dual exhaust. These audits were used only to verify compliance with test procedures. No attempt was made to improperly influence (bribe) the lane inspectors because state policy prohibits the use of such funds ("buy money") by agencies other than the Illinois State Police. The covert vehicles

generally pass the test, but the Agency occasionally attempts to make the vehicle fail by shutting down a fuel injector. However, modern engine management systems make it very difficult to get the vehicle to fail by this method for any length of time. The Agency has elected not to take more drastic measures to make vehicles fail, such as removing a catalyst.

State Inspectors document covert audits by preparing a Covert Test Procedure Monitor after the conclusion of each covert audit. Results were shared with Agency field Supervisor(s), Field Services Manager, and the contractor Operations Manager. The contractor took appropriate disciplinary action in a timely manner when serious deficiencies were observed. For the complete summary of quality assurance reports and audit results, refer to Appendix B.

#### 6 TEST PROGRAM ISSUES

During the 2011 reporting period, the Agency focused on implementing the Amendments to the "Vehicle Emissions Inspection Law of 2005" (625 ILCS 5/13C). Specifically, in anticipation of the February 1, 2012 elimination of the steady-state idle mode exhaust evaporative system integrity tests and the exemption of pre-2007 model year heavy-duty vehicles with gross vehicle weight rating (GVWR) between 8,501 and 14,000 pounds and all heavy-duty vehicles with GVWR greater than 14,000 pounds, the Agency performed the following tasks:

- Modified the test notice selection routine to ignore the newly exempt vehicle (starting with the November 2011 selection that includes vehicles with February 2012 registration expirations).
- Modified the test lane software to:
  - Remove the idle/gas cap option for fallback testing;
  - Remove all idle/gas cap associated calibration requirements and lockouts; and,
  - Add the visual inspection test for vehicles where OBD testing is not possible due to the vehicle's design.
- Develop and implement a blanket clear mechanism to clean up all newly exempted vehicles. This blanket clear will be run on the evening of January 31, 2012, and will clear the emissions test flag on the SOS vehicle registration database and mark the records on the Agency VID as permanently exempt.

These tasks were completed successfully in the allotted time and resulted in a trouble free implementation of the new OBD-only test program on February 1, 2012.

### 7 APPENDICES

#### Appendix A

United States Environmental Protection Agency test reports – Illinois test data for years 2011. Required by 40 CFR 51.366.

#### Appendix B

Quality Assurance Report and Quality Control Report for January through December 2011.

#### **Appendix C**

Number of Equipment Audits by Station and Lane – January through December 2011.

#### Appendix D

Number of Equipment Audit Failures by Station and Lane – January through December 2011.

### **APPENDIX A**

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(1) - 2011 TESTS ALL VEHICLES TESTED BY MODEL YEAR (Initial Tests Only) Included: Idle Exhaust and OBD tests that end in Pass or Fail Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests

	VEHICLE	IDLE	OBD	
MY	TYPE	TESTS	TESTS	TOTAL
1996	ALL	667	23,215	23,882
1997	ALL	4,908	141,502	146,410
1998	ALL	905	37,129	38,034
1999	ALL	7,415	211,280	218,695
2000	ALL	1,636	50,639	52,275
2001	ALL	8,823	257,951	266,774
2002	ALL	1,359	54,153	55,512
2003	ALL	9,824	295,374	305,198
2004	ALL	1,234	52,615	53,849
2005	ALL	8,408	321,591	329,999
2006	ALL	1,446	56,943	58,389
2007	ALL	7,310	327,969	335,279
2008	ALL	404	24,867	25,271
TOTAL	ALL	54,339	1,855,228	1,909,567

#### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(1) - 2011 TESTS LIGHT DUTY PASSENGER VEHICLES TESTED BY MODEL YEAR (Initial Tests Only)

Included: Idle Exhaust and OBD tests that end in Pass or Fail Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests

	VEHICLE	IDLE	OBD	
MY	TYPE	TESTS	TESTS	TOTAL
1996	LDV	0	14,522	14,522
1997	LDV	3	85,756	85,759
1998	LDV	1	21,294	21,295
1999	LDV	7	119,580	119,587
2000	LDV	3	29,999	30,002
2001	LDV	9	146,832	146,841
2002	LDV	2	28,925	28,927
2003	LDV	36	159,160	159,196
2004	LDV	3	27,508	27,511
2005	LDV	4	165,577	165,581
2006	LDV	1	31,355	31,356
2007	LDV	9	184,789	184,798
2008	LDV	0	12,928	12,928
TOTAL	LDV	78	1,028,225	1,028,303

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(1) - 2011 TESTS LIGHT DUTY TRUCKS (1 & 2) TESTED BY MODEL YEAR (Initial Tests Only)

Included: Idle Exhaust and OBD tests that end in Pass or Fail Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests

	VEHICLE	IDLE	OBD	
MY	TYPE	TESTS	TESTS	TOTAL
1996	LDT	26	8,693	8,719
1997	LDT	98	55,746	55,844
1998	LDT	28	15,835	15,863
1999	LDT	106	91,700	91,806
2000	LDT	58	20,640	20,698
2001	LDT	136	111,119	111,255
2002	LDT	45	25,228	25,273
2003	LDT	12	136,214	136,226
2004	LDT	1	25,107	25,108
2005	LDT	3	156,014	156,017
2006	LDT	1	25,588	25,589
2007	LDT	61	143,180	143,241
2008	LDT	14	11,939	11,953
TOTAL	LDT	589	827,003	827,592

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(1) - 2011 TESTS HEAVY DUTY VEHICLES TESTED BY MODEL YEAR (Initial Tests Only)

Included: Single Speed Idle tests that end in Pass or Fail Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests

	VEHICLE	IDLE	OBD	
MY	TYPE	TESTS	TESTS	TOTAL
1996	HDV	641	0	641
1997	HDV	4,807	0	4,807
1998	HDV	876	0	876
1999	HDV	7,302	0	7,302
2000	HDV	1,575	0	1,575
2001	HDV	8,678	0	8,678
2002	HDV	1,312	0	1,312
2003	HDV	9,776	0	9,776
2004	HDV	1,230	0	1,230
2005	HDV	8,401	0	8,401
2006	HDV	1,444	0	1,444
2007	HDV	7,240	0	7,240
2008	HDV	390	0	390
TOTAL	HDV	53,672	0	53,672

### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(i) - 2011 TESTS NUMBER & PERCENTAGE OF ALL VEHICLES FAILING INITIAL TEST

**Included: Initial Idle Exhaust and OBD tests** 

	a. rejecto,															
	VEHICLE	IDL	E TEST	ΓS	ОВ	D TESTS		GAS (	CAP TES	STS	TOTAL -	EXCL GC	ONLY	OVERAL	L - INCL G	C ONLY
MY	TYPE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE
1996	ALL	667	66	9.9%	23,215	4,951	21.3%	667	111	16.6%	23,882	5,017	21.0%	23,882	5,116	21.4%
1997	ALL	4,908	201	4.1%	141,502	18,668	13.2%	4,908	569	11.6%	146,410	18,869	12.9%	146,410	19,396	13.2%
1998	ALL	905	37	4.1%	37,129	6,367	17.1%	905	122	13.5%	38,034	6,404	16.8%	38,034	6,521	17.1%
1999	ALL	7,415	223	3.0%	211,280	21,618	10.2%	7,415	789	10.6%	218,695	21,841	10.0%	218,695	22,595	10.3%
2000	ALL	1,636	54	3.3%	50,639	6,359	12.6%	1,636	199	12.2%	52,275	6,413	12.3%	52,275	6,603	12.6%
2001	ALL	8,823	105	1.2%	257,951	25,761	10.0%	8,823	629	7.1%	266,774	25,866	9.7%	266,774	26,489	9.9%
2002	ALL	1,359	14	1.0%	54,153	5,743	10.6%	1,359	120	8.8%	55,512	5,757	10.4%	55,512	5,875	10.6%
2003	ALL	9,824	75	0.8%	295,374	17,357	5.9%	9,824	831	8.5%	305,198	17,432	5.7%	305,198	18,254	6.0%
2004	ALL	1,234	5	0.4%	52,615	3,286	6.2%	1,234	102	8.3%	53,849	3,291	6.1%	53,849	3,393	6.3%
2005	ALL	8,408	20	0.2%	321,591	11,973	3.7%	8,408	409	4.9%	329,999	11,993	3.6%	329,999	12,399	3.8%
2006	ALL	1,446	5	0.3%	56,943	2,087	3.7%	1,446	57	3.9%	58,389	2,092	3.6%	58,389	2,148	3.7%
2007	ALL	7,310	4	0.1%	327,969	7,066	2.2%	7,310	241	3.3%	335,279	7,070	2.1%	335,279	7,311	2.2%
2008	ALL	404	0	0.0%	24,867	220	0.9%	404	9	2.2%	25,271	220	0.9%	25,271	229	0.9%
TOTAL	ALL	54,339	809	1.5%	1,855,228	131,456	7.1%	54,339	4,188	7.7%	1,909,567	132,265	6.9%	1,909,567	136,329	7.1%

#### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(i) - 2011 TESTS

#### NUMBER & PERCENTAGE OF LIGHT DUTY PASSENGER VEHICLES FAILING INITIAL TEST

Included: Initial Idle Exhaust and OBD tests

	VEHICLE	IDL	E TES	ΓS	ОВ	D TEST	S	GAS C	AP TES	STS	TOTAL -	EXCL GC	ONLY	OVERAL	L - INCL G	C ONLY
MY	TYPE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE
1996	LDV	0	0	0.0%	14,522	2,998	20.6%	0	0	0.0%	14,522	2,998	20.6%	14,522	2,998	20.6%
1997	LDV	3	0	0.0%	85,756	10,911	12.7%	3	0	0.0%	85,759	10,911	12.7%	85,759	10,911	12.7%
1998	LDV	1	0	0.0%	21,294	3,589	16.9%	1	0	0.0%	21,295	3,589	16.9%	21,295	3,589	16.9%
1999	LDV	7	0	0.0%	119,580	12,647	10.6%	7	0	0.0%	119,587	12,647	10.6%	119,587	12,647	10.6%
2000	LDV	3	1	33.3%	29,999	4,153	13.8%	3	1	33.3%	30,002	4,154	13.8%	30,002	4,155	13.8%
2001	LDV	9	0	0.0%	146,832	14,745	10.0%	9	0	0.0%	146,841	14,745	10.0%	146,841	14,745	10.0%
2002	LDV	2	1	50.0%	28,925	3,257	11.3%	2	0	0.0%	28,927	3,258	11.3%	28,927	3,258	11.3%
2003	LDV	36	3	8.3%	159,160	9,387	5.9%	36	0	0.0%	159,196	9,390	5.9%	159,196	9,390	5.9%
2004	LDV	3	1	33.3%	27,508	1,882	6.8%	3	0	0.0%	27,511	1,883	6.8%	27,511	1,883	6.8%
2005	LDV	4	0	0.0%	165,577	6,092	3.7%	4	0	0.0%	165,581	6,092	3.7%	165,581	6,092	3.7%
2006	LDV	1	0	0.0%	31,355	1,194	3.8%	1	0	0.0%	31,356	1,194	3.8%	31,356	1,194	3.8%
2007	LDV	9	1	11.1%	184,789	4,180	2.3%	9	0	0.0%	184,798	4,181	2.3%	184,798	4,181	2.3%
2008	LDV	0	0	0.0%	12,928	124	1.0%	0	0	0.0%	12,928	124	1.0%	12,928	124	1.0%
TOTAL	LDV	78	7	9.0%	1,028,225	75,159	7.3%	78	1	1.3%	1,028,303	75,166	7.3%	1,028,303	75,167	7.3%

#### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(i) - 2011 TESTS

#### NUMBER & PERCENTAGE OF LIGHT DUTY TRUCKS (1 & 2) FAILING INITIAL TEST

Included: Initial Idle Exhaust and OBD tests

	VEHICLE	IDL	E TES	TS	ОВ	D TEST	S	GAS (	CAP TES	STS	TOTAL -	EXCL GC	ONLY	OVERAL	L - INCL G	C ONLY
MY	TYPE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE
1996	LDT	26	0	0.0%	8,693	1,953	22.5%	26	5	19.2%	8,719	1,953	22.4%	8,719	1,957	22.4%
1997	LDT	98	1	1.0%	55,746	7,757	13.9%	98	8	8.2%	55,844	7,758	13.9%	55,844	7,763	13.9%
1998	LDT	28	1	3.6%	15,835	2,778	17.5%	28	2	7.1%	15,863	2,779	17.5%	15,863	2,781	17.5%
1999	LDT	106	2	1.9%	91,700	8,971	9.8%	106	7	6.6%	91,806	8,973	9.8%	91,806	8,980	9.8%
2000	LDT	58	0	0.0%	20,640	2,206	10.7%	58	4	6.9%	20,698	2,206	10.7%	20,698	2,210	10.7%
2001	LDT	136	1	0.7%	111,119	11,016	9.9%	136	13	9.6%	111,255	11,017	9.9%	111,255	11,030	9.9%
2002	LDT	45	0	0.0%	25,228	2,486	9.9%	45	3	6.7%	25,273	2,486	9.8%	25,273	2,488	9.8%
2003	LDT	12	0	0.0%	136,214	7,970	5.9%	12	0	0.0%	136,226	7,970	5.9%	136,226	7,970	5.9%
2004	LDT	1	0	0.0%	25,107	1,404	5.6%	1	1	100.0%	25,108	1,404	5.6%	25,108	1,405	5.6%
2005	LDT	3	0	0.0%	156,014	5,881	3.8%	3	0	0.0%	156,017	5,881	3.8%	156,017	5,881	3.8%
2006	LDT	1	0	0.0%	25,588	893	3.5%	1	0	0.0%	25,589	893	3.5%	25,589	893	3.5%
2007	LDT	61	0	0.0%	143,180	2,886	2.0%	61	6	9.8%	143,241	2,886	2.0%	143,241	2,892	2.0%
2008	LDT	14	0	0.0%	11,939	96	0.8%	14	0	0.0%	11,953	96	0.8%	11,953	95	0.8%
TOTAL	LDT	589	5	0.8%	827,003	56,297	6.8%	589	49	8.3%	827,592	56,302	6.8%	827,592	56,345	6.8%

### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(i) - 2011 TESTS

NUMBER & PERCENTAGE OF HEAVY DUTY VEHICLES FAILING INITIAL TEST

**Included: Idle Exhaust Tests** 

	VEHICLE	IDL	E TES	ΓS	ОВ	D TEST	S	GAS (	CAP TES	STS	TOTAL -	EXCL GO	ONLY	OVERAL	L - INCL G	C ONLY
MY	TYPE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE	TESTED	FAIL	RATE
1996	HDV	641	66	10.3%	0	0	0.0%	641	106	16.5%	641	66	10.3%	641	161	25.1%
1997	HDV	4,807	200	4.2%	0	0	0.0%	4,807	561	11.7%	4,807	200	4.2%	4,807	722	15.0%
1998	HDV	876	36	4.1%	0	0	0.0%	876	120	13.7%	876	36	4.1%	876	151	17.2%
1999	HDV	7,302	221	3.0%	0	0	0.0%	7,302	782	10.7%	7,302	221	3.0%	7,302	968	13.3%
2000	HDV	1,575	53	3.4%	0	0	0.0%	1,575	194	12.3%	1,575	53	3.4%	1,575	238	15.1%
2001	HDV	8,678	104	1.2%	0	0	0.0%	8,678	616	7.1%	8,678	104	1.2%	8,678	714	8.2%
2002	HDV	1,312	13	1.0%	0	0	0.0%	1,312	117	8.9%	1,312	13	1.0%	1,312	129	9.8%
2003	HDV	9,776	72	0.7%	0	0	0.0%	9,776	831	8.5%	9,776	72	0.7%	9,776	894	9.1%
2004	HDV	1,230	4	0.3%	0	0	0.0%	1,230	101	8.2%	1,230	4	0.3%	1,230	105	8.5%
2005	HDV	8,401	20	0.2%	0	0	0.0%	8,401	409	4.9%	8,401	20	0.2%	8,401	426	5.1%
2006	HDV	1,444	5	0.3%	0	0	0.0%	1,444	57	3.9%	1,444	5	0.3%	1,444	61	4.2%
2007	HDV	7,240	3	0.0%	0	0	0.0%	7,240	235	3.2%	7,240	3	0.0%	7,240	238	3.3%
2008	HDV	390	0	0.0%	0	0	0.0%	390	9	2.3%	390	0	0.0%	390	10	2.6%
TOTAL	HDV	53,672	797	1.5%	0	0	0.0%	53,672	4,138	7.7%	53,672	797	1.5%	53,672	4,817	9.0%

### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(ii) & (iii) - 2011 TESTS FIRST RETEST RESULTS FOR ALL INITIALLY FAILED VEHICLES

Included: 1st Idle Exhaust and OBD Retests **Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests** 

	VEHICLE		IDL	E TESTS	3			O	BD TEST	S		G	SAS CAP	ONLY RI	ETEST	S	TOTAL					
MY	TYPE	1ST RT	PASS	<b>PRATE</b>	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	FRATE	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	
1996	ALL	42	25	59.5%	17	40.5%	2,482	1,911	77.0%	571	23.0%	98	97	99.0%	1	1.0%	2,622	2,033	77.5%	589	22.5%	
1997	ALL	160	100	62.5%	60	37.5%	12,182	10,064	82.6%	2,118	17.4%	520	511	98.3%	9	1.7%	12,862	10,675	83.0%	2,187	17.0%	
1998	ALL	28	13	46.4%	15	53.6%	3,456	2,756	79.7%	700	20.3%	115	114	99.1%	1	0.9%	3,599	2,883	80.1%	716	19.9%	
1999	ALL	181	110	60.8%	71	39.2%	14,638	12,681	86.6%	1,957	13.4%	750	736	98.1%	14	1.9%	15,569	13,527	86.9%	2,042	13.1%	
2000	ALL	37	19	51.4%	18	48.6%	3,677	3,062	83.3%	615	16.7%	190	187	98.4%	3	1.6%	3,904	3,268	83.7%	636	16.3%	
2001	ALL	90	70	77.8%	20	22.2%	18,454	15,959	86.5%	2,495	13.5%	619	609	98.4%	10	1.6%	19,163	16,638	86.8%	2,525	13.2%	
2002	ALL	12	5	41.7%	7	58.3%	3,482	2,991	85.9%	491	14.1%	110	110	100.0%	0	0.0%	3,604	3,106	86.2%	498	13.8%	
2003	ALL	61	48	78.7%	13	21.3%	13,289	12,148	91.4%	1,141	8.6%	813	805	99.0%	8	1.0%	14,163	13,001	91.8%	1,162	8.2%	
2004	ALL	3	2	66.7%	1	33.3%	2,055	1,799	87.5%	256	12.5%	99	96	97.0%	3	3.0%	2,157	1,897	87.9%	260	12.1%	
2005	ALL	17	10	58.8%	7	41.2%	8,874	8,190	92.3%	684	7.7%	403	395	98.0%	8	2.0%	9,294	8,595	92.5%	699	7.5%	
2006	ALL	3	3	100.0%	0	0.0%	1,346	1,210	89.9%	136	10.1%	56	55	98.2%	1	1.8%	1,405	1,268	90.2%	137	9.8%	
2007	ALL	3	2	66.7%	1	33.3%	5,043	4,699	93.2%	344	6.8%	239	236	98.7%	3	1.3%	5,285	4,937	93.4%	348	6.6%	
2008	ALL	0	0	0.0%	0	0.0%	67	65	97.0%	2	3.0%	7	7	100.0%	0	0.0%	74	72	97.3%	2	2.7%	
TOTAL	ALL	637	407	63.9%	230	36.1%	89,045	77,535	87.1%	11,510	12.9%	4,019	3,958	98.5%	61	1.5%	93,701	81,900	87.4%	11,801	12.6%	

### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(ii) & (iii) - 2011 TESTS FIRST RETEST RESULTS FOR INITIALLY FAILED LIGHT DUTY PASSENGER VEHICLES

Included: 1st Idle Exhaust and OBD Retests

LAUIGGE	u. rejects,																				
	VEHICLE		IDI	LE TESTS	3			OE	D TESTS	3			SAS CAP	ONLY RE	ETEST	S			TOTAL		
MY	TYPE	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	FRATE
1996	LDV	0	0	0.0%	0	0.0%	1,502	1,160	77.2%	342	22.8%	0	0	0.0%	0	0.0%	1,502	1,160	77.2%	342	22.8%
1997	LDV	0	0	0.0%	0	0.0%	6,931	5,758	83.1%	1,173	16.9%	0	0	0.0%	0	0.0%	6,931	5,758	83.1%	1,173	16.9%
1998	LDV	0	0	0.0%	0	0.0%	1,955	1,562	79.9%	393	20.1%	0	0	0.0%	0	0.0%	1,955	1,562	79.9%	393	20.1%
1999	LDV	0	0	0.0%	0	0.0%	8,288	7,189	86.7%	1,099	13.3%	0	0	0.0%	0	0.0%	8,288	7,189	86.7%	1,099	13.3%
2000	LDV	0	0	0.0%	0	0.0%	2,379	1,968	82.7%	411	17.3%	1	1	100.0%	0	0.0%	2,380	1,969	82.7%	411	17.3%
2001	LDV	0	0	0.0%	0	0.0%	10,162	8,746	86.1%	1,416	13.9%	0	0	0.0%	0	0.0%	10,162	8,746	86.1%	1,416	13.9%
2002	LDV	1	1	100.0%	0	0.0%	1,883	1,595	84.7%	288	15.3%	0	0	0.0%	0	0.0%	1,884	1,596	84.7%	288	15.3%
2003	LDV	1	1	100.0%	0	0.0%	6,927	6,252	90.3%	675	9.7%	0	0	0.0%	0	0.0%	6,928	6,253	90.3%	675	9.7%
2004	LDV	0	0	0.0%	0	0.0%	1,166	1,001	85.8%	165	14.2%	0	0	0.0%	0	0.0%	1,166	1,001	85.8%	165	14.2%
2005	LDV	0	0	0.0%	0	0.0%	4,361	3,989	91.5%	372	8.5%	0	0	0.0%	0	0.0%	4,361	3,989	91.5%	372	8.5%
2006	LDV	0	0	0.0%	0	0.0%	769	687	89.3%	82	10.7%	0	0	0.0%	0	0.0%	769	687	89.3%	82	10.7%
2007	LDV	0	0	0.0%	0	0.0%	2,858	2,644	92.5%	214	7.5%	0	0	0.0%	0	0.0%	2,858	2,644	92.5%	214	7.5%
2008	LDV	0	0	0.0%	0	0.0%	34	33	97.1%	1	2.9%	0	0	0.0%	0	0.0%	34	33	97.1%	1	2.9%
TOTAL	LDV	2	2	100.0%	0	0.0%	49,215	42,584	86.5%	6,631	13.5%	1	1	100.0%	0	0.0%	49,218	42,587	86.5%	6,631	13.5%

### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(ii) & (iii) - 2011 TESTS FIRST RETEST RESULTS FOR INITIALLY FAILED LIGHT DUTY TRUCKS (1 & 2)

Included: 1st Idle Exhaust and OBD Retests

LAGIGGE	u. Itojecis,					1000															
	VEHICLE		IDI	LE TESTS	5			OE	D TESTS	3			SAS CAP	ONLY RE	TEST	S			TOTAL		
MY	TYPE	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>
1996	LDT	0	0	0.0%	0	0.0%	980	751	76.6%	229	23.4%	4	4	100.0%	0	0.0%	984	755	76.7%	229	23.3%
1997	LDT	1	0	0.0%	1	100.0%	5,251	4,306	82.0%	945	18.0%	7	6	85.7%	1	14.3%	5,259	4,312	82.0%	947	18.0%
1998	LDT	1	1	100.0%	0	0.0%	1,501	1,194	79.5%	307	20.5%	3	2	66.7%	1	33.3%	1,505	1,197	79.5%	308	20.5%
1999	LDT	0	0	0.0%	0	0.0%	6,350	5,492	86.5%	858	13.5%	7	7	100.0%	0	0.0%	6,357	5,499	86.5%	858	13.5%
2000	LDT	0	0	0.0%	0	0.0%	1,298	1,094	84.3%	204	15.7%	4	4	100.0%	0	0.0%	1,302	1,098	84.3%	204	15.7%
2001	LDT	1	1	100.0%	0	0.0%	8,292	7,213	87.0%	1,079	13.0%	13	13	100.0%	0	0.0%	8,306	7,227	87.0%	1,079	13.0%
2002	LDT	0	0	0.0%	0	0.0%	1,599	1,396	87.3%	203	12.7%	2	2	100.0%	0	0.0%	1,601	1,398	87.3%	203	12.7%
2003	LDT	0	0	0.0%	0	0.0%	6,362	5,896	92.7%	466	7.3%	0	0	0.0%	0	0.0%	6,362	5,896	92.7%	466	7.3%
2004	LDT	0	0	0.0%	0	0.0%	889	798	89.8%	91	10.2%	1	1	100.0%	0	0.0%	890	799	89.8%	91	10.2%
2005	LDT	0	0	0.0%	0	0.0%	4,513	4,201	93.1%	312	6.9%	0	0	0.0%	0	0.0%	4,513	4,201	93.1%	312	6.9%
2006	LDT	0	0	0.0%	0	0.0%	577	523	90.6%	54	9.4%	0	0	0.0%	0	0.0%	577	523	90.6%	54	9.4%
2007	LDT	0	0	0.0%	0	0.0%	2,185	2,055	94.1%	130	5.9%	6	6	100.0%	0	0.0%	2,191	2,061	94.1%	130	5.9%
2008	LDT	0	0	0.0%	0	0.0%	33	32	97.0%	1	3.0%	0	0	0.0%	0	0.0%	33	32	97.0%	1	3.0%
TOTAL	LDT	3	2	66.7%	1	33.3%	39,830	34,951	87.8%	4,879	12.2%	47	45	95.7%	2	4.3%	39,880	34,998	87.8%	4,882	12.2%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(ii) & (iii) - 2011 TESTS FIRST RETEST RESULTS FOR INITIALLY FAILED HEAVY DUTY VEHICLES

Included: 1st Idle Exhaust and OBD Retests

	VEHICLE IDLE TESTS OBD TESTS GAS CAP ONLY RETESTS TOTAL																				
	VEHICLE		IDL	LE TESTS	3			OE	BD TESTS	3		G	SAS CAP	ONLY RI	ETEST	S			TOTAL		
MY	TYPE	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	FRATE	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>	1ST RT	PASS	P RATE	FAIL	<b>FRATE</b>
1996	HDV	42	25	59.5%	17	40.5%	0	0	0.0%	0	0.0%	94	93	98.9%	1	1.1%	136	118	86.8%	18	13.2%
1997	HDV	159	100	62.9%	59	37.1%	0	0	0.0%	0	0.0%	513	505	98.4%	8	1.6%	672	605	90.0%	67	10.0%
1998	HDV	27	12	44.4%	15	55.6%	0	0	0.0%	0	0.0%	112	112	100.0%	0	0.0%	139	124	89.2%	15	10.8%
1999	HDV	181	110	60.8%	71	39.2%	0	0	0.0%	0	0.0%	743	729	98.1%	14	1.9%	924	839	90.8%	85	9.2%
2000	HDV	37	19	51.4%	18	48.6%	0	0	0.0%	0	0.0%	185	182	98.4%	3	1.6%	222	201	90.5%	21	9.5%
2001	HDV	89	69	77.5%	20	22.5%	0	0	0.0%	0	0.0%	606	596	98.3%	10	1.7%	695	665	95.7%	30	4.3%
2002	HDV	11	4	36.4%	7	63.6%	0	0	0.0%	0	0.0%	108	108	100.0%	0	0.0%	119	112	94.1%	7	5.9%
2003	HDV	60	47	78.3%	13	21.7%	0	0	0.0%	0	0.0%	813	805	99.0%	8	1.0%	873	852	97.6%	21	2.4%
2004	HDV	3	2	66.7%	1	33.3%	0	0	0.0%	0	0.0%	98	95	96.9%	3	3.1%	101	97	96.0%	4	4.0%
2005	HDV	17	10	58.8%	7	41.2%	0	0	0.0%	0	0.0%	403	395	98.0%	8	2.0%	420	405	96.4%	15	3.6%
2006	HDV	3	3	100.0%	0	0.0%	0	0	0.0%	0	0.0%	56	55	98.2%	1	1.8%	59	58	98.3%	1	1.7%
2007	HDV	3	2	66.7%	1	33.3%	0	0	0.0%	0	0.0%	233	230	98.7%	3	1.3%	236	232	98.3%	4	1.7%
2008	HDV	0	0	0.0%	0	0.0%	0	0	0.0%	0	0.0%	7	7	100.0%	0	0.0%	7	7	100.0%	0	0.0%
TOTAL	HDV	632	403	63.8%	229	36.2%	0	0	0.0%	0	0.0%	3,971	3,912	98.5%	59	1.5%	4,603	4,315	93.7%	288	6.3%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(iv) - 2011 TESTS ALL INITIALLY FAILED VEHICLES PASSING THE SECOND OR SUBSEQUENT RETEST

Included: 2nd or Greater Idle Exhaust and OBD Retests

	VEHICLE						OBD	TESTS				GAS CAP	ONI Y T	FSTS			TC	TAL			
MY	TYPE	INIT FAIL	2ND+ RT		% INIT	% 2ND	INIT FAIL	2ND+ RT			% 2ND		2ND+ RT			% 2ND	INIT FAIL			% INIT	% 2ND
				1 700									ZINDTINI	1 700							
1996	ALL	66	15	8	12.1%	53.3%	4,951	367	216	4.4%	58.9%	111	3	3	2.7%	100.0%	5,116	385	227	4.4%	59.0%
1997	ALL	201	43	27	13.4%	62.8%	18,668	1,565	1,017	5.4%	65.0%	569	25	25	4.4%	100.0%	19,396	1,633	1,069	5.5%	65.5%
1998	ALL	37	14	6	16.2%	42.9%	6,367	456	290	4.6%	63.6%	122	3	3	2.5%	100.0%	6,521	473	299	4.6%	63.2%
1999	ALL	223	76	35	15.7%	46.1%	21,618	1,467	1,003	4.6%	68.4%	789	26	26	3.3%	100.0%	22,595	1,569	1,064	4.7%	67.8%
2000	ALL	54	17	8	14.8%	47.1%	6,359	410	266	4.2%	64.9%	199	6	6	3.0%	100.0%	6,603	433	280	4.2%	64.7%
2001	ALL	105	16	6	5.7%	37.5%	25,761	1,754	1,136	4.4%	64.8%	629	16	16	2.5%	100.0%	26,489	1,786	1,158	4.4%	64.8%
2002	ALL	14	4	1	7.1%	25.0%	5,743	341	228	4.0%	66.9%	120	0	0	0.0%	0.0%	5,875	345	229	3.9%	66.4%
2003	ALL	75	5	4	5.3%	80.0%	17,357	872	613	3.5%	70.3%	831	14	14	1.7%	100.0%	18,254	891	631	3.5%	70.8%
2004	ALL	5	1	1	20.0%	100.0%	3,286	183	117	3.6%	63.9%	102	3	3	2.9%	100.0%	3,393	187	121	3.6%	64.7%
2005	ALL	20	3	3	15.0%	100.0%	11,973	522	391	3.3%	74.9%	409	10	10	2.4%	100.0%	12,399	535	404	3.3%	75.5%
2006	ALL	5	0	0	0.0%	0.0%	2,087	101	82	3.9%	81.2%	57	0	0	0.0%	0.0%	2,148	101	82	3.8%	81.2%
2007	ALL	4	1	1	25.0%	100.0%	7,066	287	214	3.0%	74.6%	241	3	3	1.2%	100.0%	7,311	291	218	3.0%	74.9%
2008	ALL	0	0	0	0.0%	0.0%	220	0	0	0.0%	0.0%	9	0	0	0.0%	0.0%	229	0	0	0.0%	0.0%
TOTAL	ALL	809	195	100	12.4%	51.3%	131,456	8,325	5,573	4.2%	66.9%	4,188	109	109	2.6%	100.0%	136,329	8,629	5,782	4.2%	67.0%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(iv) - 2011 TESTS INITIALLY FAILED LIGHT DUTY PASSENGER VEHICLES PASSING THE SECOND OR SUBSEQUENT RETEST

Included: 2nd or Greater Idle Exhaust and OBD Retests

	VEHICLE		IDLE TESTS			OBD	TESTS				<b>GAS CAP</b>	ONLY T	ESTS			TC	TAL				
MY	TYPE	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND
1996	LDV	0	0	0	0.0%	0.0%	2,998	209	125	4.2%	59.8%	0	0	0	0.0%	0.0%	2,998	209	125	4.2%	59.8%
1997	LDV	0	0	0	0.0%	0.0%	10,911	828	526	4.8%	63.5%	0	0	0	0.0%	0.0%	10,911	828	526	4.8%	63.5%
1998	LDV	0	0	0	0.0%	0.0%	3,589	248	164	4.6%	66.1%	0	0	0	0.0%	0.0%	3,589	248	164	4.6%	66.1%
1999	LDV	0	0	0	0.0%	0.0%	12,647	804	545	4.3%	67.8%	0	0	0	0.0%	0.0%	12,647	804	545	4.3%	67.8%
2000	LDV	1	0	0	0.0%	0.0%	4,153	268	171	4.1%	63.8%	1	0	0	0.0%	0.0%	4,155	268	171	4.1%	63.8%
2001	LDV	0	0	0	0.0%	0.0%	14,745	964	600	4.1%	62.2%	0	0	0	0.0%	0.0%	14,745	964	600	4.1%	62.2%
2002	LDV	1	0	0	0.0%	0.0%	3,257	200	127	3.9%	63.5%	0	0	0	0.0%	0.0%	3,258	200	127	3.9%	63.5%
2003	LDV	3	0	0	0.0%	0.0%	9,387	478	339	3.6%	70.9%	0	0	0	0.0%	0.0%	9,390	478	339	3.6%	70.9%
2004	LDV	1	0	0	0.0%	0.0%	1,882	119	74	3.9%	62.2%	0	0	0	0.0%	0.0%	1,883	119	74	3.9%	62.2%
2005	LDV	0	0	0	0.0%	0.0%	6,092	277	208	3.4%	75.1%	0	0	0	0.0%	0.0%	6,092	277	208	3.4%	75.1%
2006	LDV	0	0	0	0.0%	0.0%	1,194	62	48	4.0%	77.4%	0	0	0	0.0%	0.0%	1,194	62	48	4.0%	77.4%
2007	LDV	1	0	0	0.0%	0.0%	4,180	176	122	2.9%	69.3%	0	0	0	0.0%	0.0%	4,181	176	122	2.9%	69.3%
2008	LDV	0	0	0	0.0%	0.0%	124	0	0	0.0%	0.0%	0	0	0	0.0%	0.0%	124	0	0	0.0%	0.0%
TOTAL	LDV	7	0	0	0.0%	0.0%	75,159	4,633	3,049	4.1%	65.8%	1	0	0	0.0%	0.0%	75,167	4,633	3,049	4.1%	65.8%

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(iv) - 2011 TESTS INITIALLY FAILED LIGHT DUTY TRUCKS (1 & 2) PASSING THE SECOND OR SUBSEQUENT RETEST

Included: 2nd or Greater Idle Exhaust and OBD Retests

	VEHICLE		IDLE TESTS			OBD	TESTS				<b>GAS CAP</b>	ONLY T	ESTS			TOTAL					
MY	TYPE	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND
1996	LDT	0	0	0	0.0%	0.0%	1,953	158	91	4.7%	57.6%	5	0	0	0.0%	0.0%	1,957	158	91	4.6%	57.6%
1997	LDT	1	0	0	0.0%	0.0%	7,757	737	491	6.3%	66.6%	8	2	2	25.0%	100.0%	7,763	739	493	6.4%	66.7%
1998	LDT	1	0	0	0.0%	0.0%	2,778	208	126	4.5%	60.6%	2	1	1	50.0%	100.0%	2,781	209	127	4.6%	60.8%
1999	LDT	2	0	0	0.0%	0.0%	8,971	663	458	5.1%	69.1%	7	0	0	0.0%	0.0%	8,980	663	458	5.1%	69.1%
2000	LDT	0	0	0	0.0%	0.0%	2,206	142	95	4.3%	66.9%	4	0	0	0.0%	0.0%	2,210	142	95	4.3%	66.9%
2001	LDT	1	0	0	0.0%	0.0%	11,016	790	536	4.9%	67.8%	13	0	0	0.0%	0.0%	11,030	790	536	4.9%	67.8%
2002	LDT	0	0	0	0.0%	0.0%	2,486	141	101	4.1%	71.6%	3	0	0	0.0%	0.0%	2,488	141	101	4.1%	71.6%
2003	LDT	0	0	0	0.0%	0.0%	7,970	394	274	3.4%	69.5%	0	0	0	0.0%	0.0%	7,970	394	274	3.4%	69.5%
2004	LDT	0	0	0	0.0%	0.0%	1,404	64	43	3.1%	67.2%	1	0	0	0.0%	0.0%	1,405	64	43	3.1%	67.2%
2005	LDT	0	0	0	0.0%	0.0%	5,881	245	183	3.1%	74.7%	0	0	0	0.0%	0.0%	5,881	245	183	3.1%	74.7%
2006	LDT	0	0	0	0.0%	0.0%	893	39	34	3.8%	87.2%	0	0	0	0.0%	0.0%	893	39	34	3.8%	87.2%
2007	LDT	0	0	0	0.0%	0.0%	2,886	111	92	3.2%	82.9%	6	0	0	0.0%	0.0%	2,892	111	92	3.2%	82.9%
2008	LDT	0	0	0	0.0%	0.0%	96	0	0	0.0%	0.0%	0	0	0	0.0%	0.0%	95	0	0	0.0%	0.0%
TOTAL	LDT	5	0	0	0.0%	0.0%	56,297	3,692	2,524	4.5%	68.4%	49	3	3	6.1%	100.0%	56,345	3,695	2,527	4.5%	68.4%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(iv) - 2011 TESTS INITIALLY FAILED HEAVY DUTY VEHICLES PASSING THE SECOND OR SUBSEQUENT RETEST

Included: 2nd or Greater Idle Exhaust and OBD Retests

	VEHICLE						ORD	TESTS				GAS CAP	ONI V T	FSTS			TC	OTAL			
	_																				
MY	TYPE	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	% 2ND	INIT FAIL	2ND+ RT	PASS	% INIT	, % 2ND
1996	HDV	66	15	8	12.1%	53.3%	0	0	0	0.0%	0.0%	106	3	3	2.8%	100.0%	161	18	11	6.8%	61.1%
1997	HDV	200	43	27	13.5%	62.8%	0	0	0	0.0%	0.0%	561	23	23	4.1%	100.0%	722	66	50	6.9%	75.8%
1998	HDV	36	14	6	16.7%	42.9%	0	0	0	0.0%	0.0%	120	2	2	1.7%	100.0%	151	16	8	5.3%	50.0%
1999	HDV	221	76	35	15.8%	46.1%	0	0	0	0.0%	0.0%	782	26	26	3.3%	100.0%	968	102	61	6.3%	59.8%
2000	HDV	53	17	8	15.1%	47.1%	0	0	0	0.0%	0.0%	194	6	6	3.1%	100.0%	238	23	14	5.9%	60.9%
2001	HDV	104	16	6	5.8%	37.5%	0	0	0	0.0%	0.0%	616	16	16	2.6%	100.0%	714	32	22	3.1%	68.8%
2002	HDV	13	4	1	7.7%	25.0%	0	0	0	0.0%	0.0%	117	0	0	0.0%	0.0%	129	4	1	0.8%	25.0%
2003	HDV	72	5	4	5.6%	80.0%	0	0	0	0.0%	0.0%	831	14	14	1.7%	100.0%	894	19	18	2.0%	94.7%
2004	HDV	4	1	1	25.0%	100.0%	0	0	0	0.0%	0.0%	101	3	3	3.0%	100.0%	105	4	4	3.8%	100.0%
2005	HDV	20	3	3	15.0%	100.0%	0	0	0	0.0%	0.0%	409	10	10	2.4%	100.0%	426	13	13	3.1%	100.0%
2006	HDV	5	0	0	0.0%	0.0%	0	0	0	0.0%	0.0%	57	0	0	0.0%	0.0%	61	0	0	0.0%	0.0%
2007	HDV	3	1	1	33.3%	100.0%	0	0	0	0.0%	0.0%	235	3	3	1.3%	100.0%	238	4	4	1.7%	100.0%
2008	HDV	0	0	0	0.0%	0.0%	0	0	0	0.0%	0.0%	9	0	0	0.0%	0.0%	10	0	0	0.0%	0.0%
TOTAL	HDV	797	195	100	12.5%	51.3%	0	0	0	0.0%	0.0%	4,138	106	106	2.6%	100.0%	4,817	301	206	4.3%	68.4%

# USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(v) - 2011 TESTS ALL INITIALLY FAILED VEHICLES RECEIVING A WAIVER

	VEHICLE	INITIAL		
MY	TYPE	FAILS	WAIVER	RATE
1996	ALL	5,017	111	2.2%
1997	ALL	18,869	329	1.7%
1998	ALL	6,404	124	1.9%
1999	ALL	21,841	332	1.5%
2000	ALL	6,413	111	1.7%
2001	ALL	25,866	624	2.4%
2002	ALL	5,757	118	2.0%
2003	ALL	17,432	233	1.3%
2004	ALL	3,291	68	2.1%
2005	ALL	11,993	125	1.0%
2006	ALL	2,092	22	1.1%
2007	ALL	7,070	46	0.7%
2008	ALL	220	0	0.0%
TOTAL	ALL	132,265	2,243	1.7%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(v) - 2011 TESTS INITIALLY FAILED LIGHT DUTY PASSENGER VEHICLES RECEIVING A WAIVER

	VEHICLE	INITIAL		
MY	TYPE	FAILS	WAIVER	RATE
1996	LDV	2,998	75	2.5%
1997	LDV	10,911	196	1.8%
1998	LDV	3,589	70	2.0%
1999	LDV	12,647	197	1.6%
2000	LDV	4,154	71	1.7%
2001	LDV	14,745	375	2.5%
2002	LDV	3,258	72	2.2%
2003	LDV	9,390	147	1.6%
2004	LDV	1,883	40	2.1%
2005	LDV	6,092	68	1.1%
2006	LDV	1,194	13	1.1%
2007	LDV	4,181	36	0.9%
2008	LDV	124	0	0.0%
TOTAL	LDV	75,166	1,360	1.8%

# USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(v) - 2011 TESTS INITIALLY FAILED LIGHT DUTY TRUCKS (1 & 2) RECEIVING A WAIVER

	VEHICLE	INITIAL		
MY	TYPE	FAILS	WAIVER	RATE
1996	LDT	1,953	34	1.7%
1997	LDT	7,758	123	1.6%
1998	LDT	2,779	51	1.8%
1999	LDT	8,973	122	1.4%
2000	LDT	2,206	35	1.6%
2001	LDT	11,017	245	2.2%
2002	LDT	2,486	44	1.8%
2003	LDT	7,970	86	1.1%
2004	LDT	1,404	28	2.0%
2005	LDT	5,881	57	1.0%
2006	LDT	893	9	1.0%
2007	LDT	2,886	10	0.3%
2008	LDT	96	0	0.0%
TOTAL	LDT	56,302	844	1.5%

# USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(v) - 2011 TESTS INITIALLY FAILED HEAVY DUTY VEHICLES RECEIVING A WAIVER

	VEHICLE	INITIAL		
MY	TYPE	FAILS	WAIVER	RATE
1996	HDV	66	2	3.0%
1997	HDV	200	10	5.0%
1998	HDV	36	3	8.3%
1999	HDV	221	13	5.9%
2000	HDV	53	5	9.4%
2001	HDV	104	4	3.8%
2002	HDV	13	2	15.4%
2003	HDV	72	0	0.0%
2004	HDV	4	0	0.0%
2005	HDV	20	0	0.0%
2006	HDV	5	0	0.0%
2007	HDV	3	0	0.0%
2008	HDV	0	0	0.0%
TOTAL	HDV	797	39	4.9%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(vi) - 2011 TESTS ALL INITIALLY FAILED VEHICLES WITH NO KNOWN FINAL OUTCOME

Vehicles that failed the initial test that have not passed a retest, been deleted,

received a waiver, temporary extension, hardship extension, or been exempted as of 6/4/2012

	VEHICLE	INITIAL	NUMBER	
MY	TYPE	TESTS	W/O RES	RATE
1996	ALL	23,882	2,085	8.7%
1997	ALL	146,410	4,080	2.8%
1998	ALL	38,034	2,464	6.5%
1999	ALL	218,695	3,864	1.8%
2000	ALL	52,275	2,364	4.5%
2001	ALL	266,774	4,194	1.6%
2002	ALL	55,512	1,765	3.2%
2003	ALL	305,198	1,902	0.6%
2004	ALL	53,849	832	1.5%
2005	ALL	329,999	1,103	0.3%
2006	ALL	58,389	467	0.8%
2007	ALL	335,279	586	0.2%
2008	ALL	25,271	8	0.0%
TOTAL	ALL	1,909,567	25,714	1.3%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(vi) - 2011 TESTS INITIALLY FAILED LIGHT DUTY PASSENGER VEHICLES WITH NO KNOWN FINAL OUTCOME

Vehicles that failed the initial test that have not passed a retest, been deleted,

15,746

received a waiver, temporary extension, hardship extension, or been exempted as of 6/4/2012

1.5%

TECEIVE	i a waivei,	temporary	CALCIISIOII,	narusinp
	VEHICLE	INITIAL	NUMBER	
MY	TYPE	TESTS	W/O RES	RATE
1996	LDV	14,522	1,263	8.7%
1997	LDV	85,759	2,445	2.9%
1998	LDV	21,295	1,384	6.5%
1999	LDV	119,587	2,322	1.9%
2000	LDV	30,002	1,552	5.2%
2001	LDV	146,841	2,620	1.8%
2002	LDV	28,927	1,087	3.8%
2003	LDV	159,196	1,199	0.8%
2004	LDV	27,511	533	1.9%
2005	LDV	165,581	664	0.4%
2006	LDV	31,356	289	0.9%
2007	LDV	184,798	384	0.2%
2008	LDV	12,928	4	0.0%

1,028,303

TOTAL

LDV

# USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(vi) - 2011 TESTS INITIALLY FAILED LIGHT DUTY TRUCKS (1 & 2) WITH NO KNOWN FINAL OUTCOME Vehicles that failed the initial test that have not passed a retest, been deleted, received a waiver, temporary extension, hardship extension, or been exempted as of 6/4/2012

	VEHICLE	INITIAL	NUMBER	
MY	TYPE	TESTS	W/O RES	RATE
1996	LDT	8,719	812	9.3%
1997	LDT	55,844	1,629	2.9%
1998	LDT	15,863	1,072	6.8%
1999	LDT	91,806	1,532	1.7%
2000	LDT	20,698	803	3.9%
2001	LDT	111,255	1,574	1.4%
2002	LDT	25,273	672	2.7%
2003	LDT	136,226	702	0.5%
2004	LDT	25,108	293	1.2%
2005	LDT	156,017	438	0.3%
2006	LDT	25,589	174	0.7%
2007	LDT	143,241	202	0.1%
2008	LDT	11,953	4	0.0%
TOTAL	LDT	827,592	9,907	1.2%

# USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(vi) - 2011 TESTS INITIALLY FAILED HEAVY DUTY VEHICLES WITH NO KNOWN FINAL OUTCOME Vehicles that failed the initial test that have not passed a retest, been deleted, received a waiver, temporary extension, hardship extension, or been exempted as of 6/4/2012

	VEHICLE	INITIAL	NUMBER	
MY	TYPE	TESTS	W/O RES	RATE
1996	HDV	641	10	1.6%
1997	HDV	4,807	6	0.1%
1998	HDV	876	8	0.9%
1999	HDV	7,302	10	0.1%
2000	HDV	1,575	9	0.6%
2001	HDV	8,678	0	0.0%
2002	HDV	1,312	6	0.5%
2003	HDV	9,776	1	0.0%
2004	HDV	1,230	6	0.5%
2005	HDV	8,401	1	0.0%
2006	HDV	1,444	4	0.3%
2007	HDV	7,240	0	0.0%
2008	HDV	390	0	0.0%
TOTAL	HDV	53.672	61	0.1%

#### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xi) & (xii) - 2011 TESTS ALL VEHICLE OBD TEST RESULTS

Included: Initial OBD Tests that end in Pass or Fail

	<u> </u>					
	VEHICLE			PASS		FAIL
MY	TYPE	TESTED	PASS	RATE	FAIL	RATE
1996	ALL	23,215	18,264	78.7%	4,951	21.3%
1997	ALL	141,502	122,834	86.8%	18,668	13.2%
1998	ALL	37,129	30,762	82.9%	6,367	17.1%
1999	ALL	211,280	189,662	89.8%	21,618	10.2%
2000	ALL	50,639	44,280	87.4%	6,359	12.6%
2001	ALL	257,951	232,190	90.0%	25,761	10.0%
2002	ALL	54,153	48,410	89.4%	5,743	10.6%
2003	ALL	295,375	278,018	94.1%	17,357	5.9%
2004	ALL	52,615	49,329	93.8%	3,286	6.2%
2005	ALL	321,591	309,618	96.3%	11,973	3.7%
2006	ALL	56,942	54,855	96.3%	2,087	3.7%
2007	ALL	327,969	320,903	97.8%	7,066	2.2%
2008	ALL	24,867	24,647	99.1%	220	0.9%
TOTAL	ALL	1,855,228	1,723,772	92.9%	131,456	7.1%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xi) & (xii) - 2011 TESTS LIGHT DUTY PASSENGER VEHICLE OBD TEST RESULTS

Included: Initial OBD Tests that end in Pass or Fail Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests

		100.10, 1010		,		
	VEHICLE			PASS		FAIL
MY	TYPE	TESTED	PASS	RATE	FAIL	RATE
1996	LDV	14,522	11,524	79.4%	2,998	20.6%
1997	LDV	85,756	74,845	87.3%	10,911	12.7%
1998	LDV	21,293	17,704	83.1%	3,589	16.9%
1999	LDV	119,580	106,933	89.4%	12,647	10.6%
2000	LDV	29,999	25,846	86.2%	4,153	13.8%
2001	LDV	146,832	132,087	90.0%	14,745	10.0%
2002	LDV	28,925	25,668	88.7%	3,257	11.3%
2003	LDV	159,160	149,773	94.1%	9,387	5.9%
2004	LDV	27,508	25,626	93.2%	1,882	6.8%
2005	LDV	165,577	159,485	96.3%	6,092	3.7%
2006	LDV	31,355	30,161	96.2%	1,194	3.8%
2007	LDV	184,789	180,609	97.7%	4,180	2.3%
2008	LDV	12,928	12,804	99.0%	124	1.0%
TOTAL	LDV	1,028,224	953,065	92.7%	75,159	7.3%

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xi) & (xii) - 2011 TESTS LIGHT DUTY TRUCKS (1 & 2) OBD TEST RESULTS

Included: Initial OBD Tests that end in Pass or Fail Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests

11,939

827,004 770,707

2008

TOTAL

LDT

LDT

	- , ,			,		
	VEHICLE			PASS		FAIL
MY	TYPE	<b>TESTED</b>	PASS	RATE	FAIL	RATE
1996	LDT	8,693	6,740	77.5%	1,953	22.5%
1997	LDT	55,746	47,989	86.1%	7,757	13.9%
1998	LDT	15,836	13,058	82.5%	2,778	17.5%
1999	LDT	91,700	82,729	90.2%	8,971	9.8%
2000	LDT	20,640	18,434	89.3%	2,206	10.7%
2001	LDT	111,119	100,103	90.1%	11,016	9.9%
2002	LDT	25,228	22,742	90.1%	2,486	9.9%
2003	LDT	136,215	128,245	94.1%	7,970	5.9%
2004	LDT	25,107	23,703	94.4%	1,404	5.6%
2005	LDT	156,014	150,133	96.2%	5,881	3.8%
2006	LDT	25,587	24,694	96.5%	893	3.5%
2007	LDT	143,180	140,294	98.0%	2,886	2.0%

11,843

99.2%

93.2%

96

56,297

0.8%

6.8%

# USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xiii) & (xiv) - 2011 TESTS ALL VEHICLES FAILING THE OBD TEST AND RECEIVING A FALLBACK TAILPIPE TEST

Not Applicable: Begining Jan 1, 2004 - Fallback exhaust testing not allowed for OBD fail.

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xv) through (xviii) - 2011 TESTS ALL VEHICLES - OBD AND GAS CAP TEST RESULTS

Not Applicable: Beginning February 1, 2007, Vehicles receiving an OBD test no longer require a gas cap test.

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xix) through (xxii) - 2011 TESTS

**ALL VEHICLES - MIL AND CODE STATUS** 

Included: Initial OBD Tests that end in Pass or Fail\*

**Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests** 

	VEHICLE	NO	MIL		CODES	MIL		CODES	MIL		NO	MIL	
MY	TYPE	CODES	ON	RATE	STORED	OFF	RATE	STORED	ON	RATE	CODES	OFF	RATE
1996	ALL	15,163	22	0.1%	7,744	3,101	40.0%	7,744	4,643	60.0%	15,163	15,140	99.8%
1997	ALL	105,157	21	0.0%	35,071	17,609	50.2%	35,071	17,462	49.8%	105,157	105,133	100.0%
1998	ALL	26,065	7	0.0%	10,586	4,697	44.4%	10,586	5,886	55.6%	26,065	26,058	100.0%
1999	ALL	167,084	96	0.1%	42,297	22,578	53.4%	42,297	19,719	46.6%	167,084	166,987	99.9%
2000	ALL	38,496	20	0.1%	11,733	5,784	49.3%	11,733	5,949	50.7%	38,496	38,476	99.9%
2001	ALL	207,119	27	0.0%	49,297	25,071	50.9%	49,297	24,226	49.1%	207,119	207,090	100.0%
2002	ALL	42,756	8	0.0%	11,008	5,654	51.4%	11,008	5,354	48.6%	42,756	42,747	100.0%
2003	ALL	254,578	8	0.0%	39,610	23,440	59.2%	39,610	16,170	40.8%	254,578	254,567	100.0%
2004	ALL	44,873	3	0.0%	7,420	4,456	60.1%	7,420	2,964	39.9%	44,873	44,870	100.0%
2005	ALL	291,441	9	0.0%	28,860	18,177	63.0%	28,860	10,683	37.0%	291,441	291,431	100.0%
2006	ALL	51,498	0	0.0%	5,018	3,190	63.6%	5,018	1,828	36.4%	51,498	51,498	100.0%
2007	ALL	310,122	5	0.0%	16,675	10,783	64.7%	16,675	5,892	35.3%	310,122	310,117	100.0%
2008	ALL	24,174	0	0.0%	610	473	77.5%	610	137	22.5%	24,174	24,174	100.0%
TOTAL	ALL	1,578,526	226	0.0%	265,929	145,013	54.5%	265,929	120,913	45.5%	1,578,526	1,578,288	100.0%

<sup>\*</sup>Pass = OBD Successfully scanned and MIL is NOT commanded ON

Fail = OBD Failure for codes present/MIL commanded ON

## USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xix) through (xxii) - 2011 TESTS LIGHT DUTY PASSENGER VEHICLES - MIL AND CODE STATUS

Included: Initial OBD Tests that end in Pass or Fail\*

	VEHICLE	NO	MIL		CODES	MIL		CODES	MIL		NO	MIL	
MY	TYPE	CODES	ON	RATE	<b>STORED</b>	OFF	RATE	STORED	ON	RATE	CODES	OFF	RATE
1996	LDV	9,745	20	0.2%	4,573	1,779	38.9%	4,573	2,794	61.1%	9,745	9,724	99.8%
1997	LDV	64,268	20	0.0%	20,608	10,509	51.0%	20,608	10,099	49.0%	64,268	64,247	100.0%
1998	LDV	15,057	6	0.0%	5,926	2,647	44.7%	5,926	3,276	55.3%	15,057	15,051	100.0%
1999	LDV	93,879	35	0.0%	24,405	13,054	53.5%	24,405	11,351	46.5%	93,879	93,844	100.0%
2000	LDV	22,504	5	0.0%	7,189	3,342	46.5%	7,189	3,847	53.5%	22,504	22,499	100.0%
2001	LDV	116,669	12	0.0%	29,163	15,418	52.9%	29,163	13,745	47.1%	116,669	116,656	100.0%
2002	LDV	22,533	5	0.0%	6,190	3,135	50.6%	6,190	3,055	49.4%	22,533	22,528	100.0%
2003	LDV	138,088	3	0.0%	20,474	11,685	57.1%	20,474	8,789	42.9%	138,088	138,082	100.0%
2004	LDV	23,367	1	0.0%	3,992	2,259	56.6%	3,992	1,733	43.4%	23,367	23,366	100.0%
2005	LDV	150,357	4	0.0%	14,654	9,128	62.3%	14,654	5,526	37.7%	150,357	150,352	100.0%
2006	LDV	28,394	0	0.0%	2,627	1,600	60.9%	2,627	1,027	39.1%	28,394	28,394	100.0%
2007	LDV	175,013	5	0.0%	9,002	5,598	62.2%	9,002	3,404	37.8%	175,013	175,008	100.0%
2008	LDV	12,551	0	0.0%	320	253	79.1%	320	67	20.9%	12,551	12,551	100.0%
TOTAL	LDV	872,425	116	0.0%	149,123	80,407	53.9%	149,123	68,713	46.1%	872,425	872,302	100.0%

<sup>\*</sup>Pass = OBD Successfully scanned and MIL is NOT commanded ON Fail = OBD Failure for codes present/MIL commanded ON

#### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xix) through (xxii) - 2011 TESTS

**LIGHT DUTY TRUCKS - MIL AND CODE STATUS** 

Included: Initial OBD Tests that end in Pass or Fail\*

**Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests** 

	VEHICLE	NO	MIL		CODES MIL STORED OFF			CODES	MIL		NO	MIL	
MY	TYPE	CODES	ON	RATE	STORED	OFF	RATE	STORED	ON	RATE	CODES	OFF	RATE
1996	LDT	5,418	2	0.0%	3,171	1,322	41.7%	3,171	1,849	58.3%	5,418	5,416	100.0%
1997	LDT	40,889	1	0.0%	14,463	7,100	49.1%	14,463	7,363	50.9%	40,889	40,886	100.0%
1998	LDT	11,008	1	0.0%	4,660	2,050	44.0%	4,660	2,610	56.0%	11,008	11,007	100.0%
1999	LDT	73,205	61	0.1%	17,892	9,524	53.2%	17,892	8,368	46.8%	73,205	73,143	99.9%
2000	LDT	15,992	15	0.1%	4,544	2,442	53.7%	4,544	2,102	46.3%	15,992	15,977	99.9%
2001	LDT	90,450	15	0.0%	20,134	9,653	47.9%	20,134	10,481	52.1%	90,450	90,434	100.0%
2002	LDT	20,223	3	0.0%	4,818	2,519	52.3%	4,818	2,299	47.7%	20,223	20,219	100.0%
2003	LDT	116,490	5	0.0%	19,136	11,755	61.4%	19,136	7,381	38.6%	116,490	116,485	100.0%
2004	LDT	21,506	2	0.0%	3,428	2,197	64.1%	3,428	1,231	35.9%	21,506	21,504	100.0%
2005	LDT	141,084	5	0.0%	14,206	9,049	63.7%	14,206	5,157	36.3%	141,084	141,079	100.0%
2006	LDT	23,104	0	0.0%	2,391	1,590	66.5%	2,391	801	33.5%	23,104	23,104	100.0%
2007	LDT	135,109	0	0.0%	7,673	5,185	67.6%	7,673	2,488	32.4%	135,109	135,109	100.0%
2008	LDT	11,623	0	0.0%	290	220	75.9%	290	70	24.1%	11,623	11,623	100.0%
TOTAL	LDT	706,101	110	0.0%	116,806	64,606	55.3%	116,806	52,200	44.7%	706,101	705,986	100.0%

<sup>\*</sup>Pass = OBD Successfully scanned and MIL is NOT commanded ON

Fail = OBD Failure for codes present/MIL commanded ON

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xxiii) - 2011 TESTS VEHICLES REJECTED FOR OBD READINESS - ALL VEHICLES Included: Initial OBD Tests that end in Pass, Fail or Readiness Reject Excluded: Aborts, Voided Tests, Voluntary Tests

	VEHICLE			
MY	TYPE	TESTED	*NOT READY	RATE
1996	ALL	23,253	1,499	6.4%
1997	ALL	142,741	7,656	5.4%
1998	ALL	37,207	2,404	6.5%
1999	ALL	212,621	9,006	4.2%
2000	ALL	50,651	2,361	4.7%
2001	ALL	259,924	17,400	6.7%
2002	ALL	54,029	3,232	6.0%
2003	ALL	296,325	9,421	3.2%
2004	ALL	52,551	1,655	3.1%
2005	ALL	322,097	6,210	1.9%
2006	ALL	56,918	1,092	1.9%
2007	ALL	328,266	3,601	1.1%
2008	ALL	24,937	162	0.6%
TOTAL	ALL	1,861,520	65,699	3.5%

#### \*NOT READY:

1996-2000 Model Year Vehicle = 3 or more non-continuous monitors "Not Ready" 2001+ Model Year Vehicle = 2 or more non-continuous monitors "Not Ready"

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xxiii) - 2011 TESTS VEHICLES REJECTED FOR OBD READINESS - LIGHT DUTY VEHICLES Included: Initial OBD Tests that end in Pass, Fail or Readiness Reject Excluded: Aborts, Voided Tests, Voluntary Tests

	VEHICLE			
MY	TYPE	TESTED	*NOT READY	RATE
1996	LDV	14,523	889	6.1%
1997	LDV	86,468	4,253	4.9%
1998	LDV	21,331	1,299	6.1%
1999	LDV	120,312	5,050	4.2%
2000	LDV	30,002	1,403	4.7%
2001	LDV	147,948	9,206	6.2%
2002	LDV	28,883	1,711	5.9%
2003	LDV	159,728	5,305	3.3%
2004	LDV	27,475	973	3.5%
2005	LDV	165,827	3,202	1.9%
2006	LDV	31,350	670	2.1%
2007	LDV	185,003	2,046	1.1%
2008	LDV	12,970	92	0.7%
TOTAL	LDV	1,031,820	36,099	3.5%

#### \*NOT READY:

1996-2000 Model Year Vehicle = 3 or more non-continuous monitors "Not Ready" 2001+ Model Year Vehicle = 2 or more non-continuous monitors "Not Ready"

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(2)(xxiii) - 2011 TESTS VEHICLES REJECTED FOR OBD READINESS - LIGHT TRUCKS 1 & 2 Included: Initial OBD Tests that end in Pass, Fail or Readiness Reject Excluded: Aborts, Voided Tests, Voluntary Tests

	VEHICLE			
MY	TYPE	TESTED	*NOT READY	RATE
1996	LDT	8,730	610	7.0%
1997	LDT	56,273	3,403	6.0%
1998	LDT	15,876	1,105	7.0%
1999	LDT	92,309	3,956	4.3%
2000	LDT	20,649	958	4.6%
2001	LDT	111,976	8,194	7.3%
2002	LDT	25,146	1,521	6.0%
2003	LDT	136,597	4,116	3.0%
2004	LDT	25,076	682	2.7%
2005	LDT	156,270	3,008	1.9%
2006	LDT	25,568	422	1.7%
2007	LDT	143,263	1,555	1.1%
2008	LDT	11,967	70	0.6%
TOTAL	LDT	829,700	29,600	3.6%

#### \*NOT READY:

1996-2000 Model Year Vehicle = 3 or more non-continuous monitors "Not Ready" 2001+ Model Year Vehicle = 2 or more non-continuous monitors "Not Ready"

#### USEPA TEST DATA REPORT - 40 CFR 51.366(a)(3) - 2011 TESTS

INITIAL TESTS BY MODEL YEAR AND STATION (Centralized Test-Only Stations)

Included: Idle Exhaust and OBD Initial tests with Overall Result in Pass or Fail

								(	STATION									
MY	1	3	4	7	8	11	12	13	16	22	24	26	27	29	30	53	54	TOTAL
1996	1,333	982	798	1,196	912	1,370	1,287	2,181	1,963	3,366	1,862	1,260	2,680	346	603	728	437	23,304
1997	7,347	6,735	6,660	8,554	6,597	9,561	9,301	13,046	11,122	18,864	12,317	7,264	14,364	1,751	2,727	3,505	3,738	143,453
1998	1,961	1,612	1,573	2,053	1,475	2,260	2,176	3,371	3,293	5,145	3,184	1,912	4,027	467	787	1,049	771	37,116
1999	10,406	10,512	11,330	13,478	10,470	14,544	13,805	18,445	16,400	26,183	19,653	10,793	20,046	2,537	3,908	5,320	6,173	214,003
2000	2,655	2,308	2,118	2,920	2,093	3,186	2,925	4,339	4,267	6,838	4,508	2,645	5,418	680	1,137	1,662	1,255	50,954
2001	11,977	13,177	15,562	17,253	12,825	17,808	16,892	20,940	18,677	28,650	25,403	13,798	23,905	3,081	4,937	6,709	9,085	260,679
2002	2,608	2,646	2,792	3,282	2,389	3,451	3,124	4,236	4,206	6,334	5,001	3,111	5,499	763	1,245	1,845	1,552	54,084
2003	13,224	15,714	19,693	20,486	14,897	20,636	19,574	22,283	20,792	29,856	31,034	16,294	25,786	3,407	5,546	7,340	11,564	298,126
2004	2,469	2,594	3,145	3,319	2,335	3,298	3,134	4,004	4,123	5,242	5,308	2,917	4,973	763	1,252	1,727	1,839	52,442
2005	13,629	16,877	21,727	22,346	15,650	22,275	20,525	23,550	21,786	30,550	34,074	18,072	28,089	3,994	6,120	8,539	14,087	321,890
2006	2,603	2,837	3,543	3,806	2,585	3,610	3,289	4,181	4,413	5,394	5,835	3,138	5,232	791	1,309	1,884	2,252	56,702
2007	12,922	16,140	23,175	22,699	15,691	22,265	21,119	22,699	24,536	29,065	35,400	18,029	28,367	3,972	6,097	8,185	14,387	324,748
2008	1,059	1,360	1,960	1,761	1,331	1,864	1,554	1,628	1,481	2,034	2,676	1,484	1,881	299	444	605	1,232	24,653
TOTAL	84,193	93,494	114,076	123,153	89,250	126,128	118,705	144,903	137,059	197,521	186,255	100,717	170,267	22,851	36,112	49,098	68,372	1,862,154

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(3) - 2011 TESTS INITIAL TESTS BY MODEL YEAR AND STATION (Test & Repair Stations) Included: Idle Exhaust and OBD Initial tests with Overall Result in Pass or Fall Excluded: Rejects, Aborts, Volded Tests, Voluntary Tests

																				STAT	ION																				
MY	300	303	305	306	307	308	309	311	313	317	318	322	323	325	326	330	335	336	337	338	340	342	343	401	402	403	404	406	408	409	412	413	414	415	416	417	501 6	601	602	603	TOTAL
1996	5	5	1	35	22	7	4	4	5	3	7	7	16	24	40	10	1	5	8	13	3	5	1	27	41	14	66	82	21	30	1	26	5	6	12	- 1	10	0	1	4	578
1997	23	16	12	333	118	117	34	19	93	5	39	35	126	45	235	37	27	11	32	73	13	38	4	102	124	60	312	352	96	94	23	137	39	12	37	11	60	2	7	4	2,957
1998	7	5	6	57	37	18	9	2	18	2	12	10	40	44	54	19	8	6	25	20	6	14	1	46	68	15	92	103	28	30	5	41	11	5	18	6	17	2	5	6	918
1999	32	31	18	564	182	184	68	31	137	6	95	83	180	64	342	65	48	29	51	131	46	92	3	119	199	134	409	514	172	143	39	217	40	17	59	23	91	5	16	13	4,692
2000	10	9	5	106	41	26	15	3	32	5	24	28	37	42	81	16	13	7	32	41	12	20	5	78	84	36	113		47	39	11	73	9	8	23	4	24	3	6	9	1,321
2001	56	62	32	796	226	200	83	3 25	214	9	109	108	246	70	509	58	54	31	47	158	56	119	5	147	286	197	477	608	267	171	35	302	54	26	56	22	128	5	24	17	6,095
2002	12	10	7	129	56	35	28	9	47	1	23	17	46	35	93	12	13	11	27	38	11	37	3	48	102	51	103	141	72	33	13	58	22	4	21	6	23	5	12	14	1,428
2003	75	71	27	930	292	241	119	36	243	14	160	111	250	69	579	84	92	28	46	213	76	148	5	138	316	234	436	663	389	175	58	374	73	22	49	19	161	9	17	31	7,073
2004	12	10	8	146	49	34	25	5	37	1	40	24	55	29	81	18	16	10	17	42	11	28	3	45	95	41	89	120	74	41	13	67	22	6	21	9	37	7	6	13	1,407
2005	81	85	40	1,028	371	264	125	40	312	11	211	139	326	69	604	90	113	37	26	231	78	167	4	177	355	298	482	731	465	203	71	400	90	30	70	34	190	6	21	34	8,109
2006	20	12	12	177	61	38	35	6	49	1	72	39	43	29	102	16	24	8	10	52	12	59	1	42	105	52	109	126	89	40	15	92	24	6	31	9	27	6	9	26	1,686
2007	129	132	57	1,269	391	298	207	65	359	19	364	178	303	87	656	120	152	40	22	360	83	241	17	249	593	459	547	929	613	256	91	557	119	35	131	37	275	16	36	39	10,531
2008	3	11	4	83	17	21	11	3	21	0	21	11	13	0	66	2	3	2	0	15	6	19	4	6	15	18	30	28	42	9	5	32	20	5	27	6	0	4	15	20	618
TOTAL	465	459	229	5,653	1,863	1,483	763	3 248	1,567	77	1,177	790	1,681	607	3,442	547	564	225	343	1,387	413	987	56	1,224	2,383	1,609	3,265	4,541	2,375	1,264	380	2,376	528	182	555	187	1,043	70	175	230	47,413

Test and Repair Stations (300+) are listed in "Illinois Test and Repair 2011"

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(4) - 2011 TESTS

INITIAL TEST FAILURE RATE BY MODEL YEAR AND STATION (Test Only)

Included: Idle Exhaust and OBD Initial tests with Overall Result in Pass or Fail

**Excluded: Rejects, Aborts, Voided Tests, Voluntary Tests** 

Vehicles that Pass the Exhaust Test and Fail the Gas Cap Test count as Fails

								TEST	ONLY ST	<b>TATION</b>								<b>TEST ONLY</b>	ALL STATION
MY	1	3	4	7	8	11	12	13	16	22	24	26	27	29	30	53	54	TOTAL	TOTAL
1996	20.1%	16.4%	12.3%	16.6%	13.0%	16.6%	19.3%	22.4%	26.3%	25.6%	17.9%	20.2%	27.9%	22.3%	23.5%	25.5%	13.5%	21.4%	21.4%
1997	13.1%	10.0%	9.4%	11.6%	10.0%	11.0%	12.7%	13.9%	16.7%	15.8%	10.8%	12.3%	17.9%	11.9%	14.2%	14.8%	8.4%	13.3%	13.2%
1998	16.5%	13.5%	12.2%	14.4%	13.5%	12.1%	15.3%	17.5%	21.5%	20.5%	14.3%	17.8%	21.9%	16.7%	15.4%	19.4%	11.8%	17.1%	17.1%
1999	10.2%	8.8%	7.5%	9.6%	8.3%	8.1%	11.0%	10.6%	13.4%	12.2%	8.9%	9.6%	13.9%	9.0%	9.4%	10.4%	6.7%	10.4%	10.3%
2000	11.9%	8.7%	9.3%	9.3%	10.0%	10.4%	12.0%	12.5%	16.2%	15.2%	10.0%	12.5%	16.6%	11.6%	11.3%	14.5%	8.0%	12.5%	12.6%
2001	9.7%	7.8%	7.0%	9.4%	7.7%	8.4%	10.6%	10.3%	12.1%	11.8%	8.2%	9.9%	14.1%	8.8%	9.7%	10.4%	7.6%	9.9%	9.9%
2002	9.5%	7.4%	7.8%	9.1%	7.5%	8.5%	10.3%	11.1%	12.7%	13.4%	8.8%	10.8%	14.3%	9.4%	10.0%	12.6%	7.2%	10.6%	10.6%
2003	6.1%	5.1%	4.1%	5.6%	4.9%	4.9%	6.2%	6.4%	7.5%	7.1%	4.8%	6.0%	8.7%	5.3%	6.3%	6.4%	4.6%	6.0%	6.0%
2004	4.5%	4.6%	3.6%	5.4%	4.5%	5.8%	5.4%	7.2%	7.7%	8.6%	4.9%	5.2%	10.5%	4.7%	6.2%	7.5%	5.3%	6.3%	6.3%
2005	3.7%	3.0%	2.3%	3.3%	2.7%	3.2%	3.3%	4.0%	4.6%	4.9%	3.0%	3.7%	6.5%	3.5%	3.9%	4.1%	2.8%	3.8%	3.8%
2006	2.8%	2.7%	2.6%	3.3%	2.2%	2.7%	3.6%	4.4%	4.5%	5.2%	2.8%	3.3%	6.1%	3.9%	3.4%	4.0%	1.9%	3.7%	3.7%
2007	2.1%	1.8%	1.3%	1.8%	1.3%	1.9%	1.9%	2.1%	3.1%	2.7%	1.8%	2.2%	4.1%	1.6%	2.0%	2.2%	1.4%	2.2%	2.2%
TOTAL	7.3%	5.6%	4.5%	6.2%	5.3%	5.8%	7.0%	7.8%	9.2%	9.4%	5.6%	6.8%	10.6%	6.4%	7.2%	7.8%	4.5%	7.2%	7.1%

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(4) - 2011 TESTS INITIAL TEST FAILURE RATE BY MODEL YEAR AND STATION (Test & Repair) Included: Idle Exhaust and OB Initial tests with Overall Result in Pass or Fail Excluded: Rejects, Aborts, Volded Tests, Voluntary Tests

Vehicles that Pass the Exhaust Test and Fail the Gas Cap Test count as Fails

	TEST & REPAIR STATION												TEST & REPAIR	ALL STATION																												
MY	300	303	305	306	307	308	309	311	313	317	318	322	323	325	326	330	335	336	337	338	340	342	343	401	402	403	404	406	408	409	412	413	414	415	416	417	501	601	602	603	TOTAL	TOTAL
1996	0.0%	20.0%	0.0%	8.6%	18.2%	14.3%	75.0%	25.0%	0.0%	0.0%	42.9%	28.6%	18.8%	29.2%	7.5%	20.0%	0.0%	0.0%	25.0%	69.2%	0.0%	0.0%	0.0%	40.7%	22.0%	14.3%	18.2%	25.6%	14.3%	20.0%	0.0%	23.1%	40.0%	16.7%	16.7%	100.0%	40.0%	0.0%	0.0%	50.0%	21.8%	21.4%
1997	13.0%	12.5%	8.3%	7.2%	14.4%	4.3%	14.7%	26.3%	10.8%	40.0%	12.8%	11.4%	8.7%	20.0%	8.1%	5.4%	18.5%	9.1%	15.6%	11.0%	0.0%	10.5%	25.0%	25.5%	20.2%	10.0%	14.1%	15.3%	8.3%	12.8%	8.7%	10.2%	28.2%	16.7%	37.8%	18.2%	8.3%	0.0%	14.3%	0.0%	12.6%	13.2%
1998	0.0%	0.0%	0.0%	14.0%	18.9%	11.1%	11.1%	0.0%	5.6%	0.0%	25.0%	10.0%	22.5%	29.5%	9.3%	21.1%	12.5%	0.0%	32.0%	10.0%	0.0%	14.3%	100.0%	30.4%	10.3%	0.0%	20.7%	26.2%	14.3%	16.7%	0.0%	17.1%	27.3%	20.0%	33.3%	33.3%	5.9%	0.0%	0.0%	16.7%	18.0%	17.1%
1999	3.1%	0.0%	16.7%	5.7%	10.4%	4.3%	8.8%	12.9%	7.3%	0.0%	6.3%	2.4%	9.4%	15.6%	7.6%	12.3%	8.3%	3.4%	23.5%	10.7%	10.9%	7.6%	33.3%	21.0%	14.6%	7.5%	8.6%	11.9%	9.3%	14.0%	5.1%	6.5%	15.0%	29.4%	22.0%	4.3%	5.5%	0.0%	18.8%	0.0%	9.4%	10.3%
2000	20.0%	22.2%	40.0%	3.8%	24.4%	11.5%	20.0%	0.0%	6.3%	20.0%	8.3%	7.1%	10.8%	26.2%	7.4%	6.3%	0.0%	14.3%	40.6%	17.1%	16.7%	10.0%	20.0%	35.9%	23.8%	5.6%	16.8%	20.1%	14.9%	17.9%	18.2%	12.3%	11.1%	12.5%	39.1%	50.0%	16.7%	33.3%	0.0%	0.0%	16.8%	12.6%
2001	8.9%	4.8%	12.5%	6.0%	7.1%	2.0%	10.8%	16.0%	6.1%	33.3%	10.1%	9.3%	10.6%	15.7%	6.7%	10.3%	14.8%	6.5%	21.3%	8.2%	3.6%	6.7%	20.0%	17.0%	12.6%	9.6%	10.5%	11.2%	8.6%	15.2%	5.7%	10.3%	16.7%	23.1%	21.4%	27.3%	7.0%	0.0%	8.3%	0.0%	9.4%	9.9%
2002	8.3%	10.0%	14.3%	5.4%	16.1%	8.6%	3.6%	0.0%	19.1%	0.0%	4.3%	11.8%	10.9%	25.7%	7.5%	16.7%	61.5%	9.1%	14.8%	13.2%	0.0%	2.7%	33.3%			7.8%	12.6%	12.8%	9.7%	6.1%	15.4%	8.6%	4.5%	0.0%	28.6%	33.3%	8.7%	0.0%	8.3%	0.0%	11.3%	10.6%
2003	1.3%	5.6%	7.4%	3.4%	4.5%	2.1%	5.0%	2.8%	3.3%	7.1%	3.1%	6.3%	3.2%	10.1%	3.6%	3.6%	13.0%	0.0%	15.2%	8.0%	3.9%	5.4%	0.0%	11.6%	10.4%	5.1%	7.1%	8.3%	3.6%	6.9%	1.7%	8.0%	5.5%	13.6%	14.3%	21.1%	5.6%	0.0%	5.9%	0.0%	5.7%	6.0%
2004	0.0%	0.0%	0.0%	1.4%	8.2%	2.9%	4.0%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	13.8%	3.7%	22.2%	6.3%	0.0%	35.3%	2.4%	9.1%	0.0%	0.0%	13.3%	9.5%	9.8%	6.7%	4.2%	6.8%	2.4%	0.0%	9.0%	0.0%	0.0%	9.5%	0.0%	10.8%	0.0%	0.0%	0.0%	5.5%	6.3%
2005	0.0%	5.9%	5.0%	2.2%	1.9%	0.4%	0.8%	5.0%	1.9%	9.1%	2.4%	2.2%	3.7%	10.1%	2.2%	2.2%	5.3%	0.0%	7.7%	3.5%	2.6%	1.2%	25.0%	8.5%	2.3%	3.4%	3.7%	6.2%	2.6%	3.9%	2.8%	6.0%	4.4%	6.7%	11.4%	8.8%	3.7%	0.0%	9.5%	5.9%	3.5%	3.8%
2006	0.0%	0.0%	0.0%	2.8%	4.9%	2.6%	2.9%	0.0%	6.1%	100.0%	1.4%	5.1%	7.0%	10.3%	1.0%	12.5%	4.2%	0.0%	0.0%	3.8%	0.0%	5.1%	0.0%	4.8%	1.9%	0.0%	7.3%	5.6%	3.4%	0.0%	0.0%	3.3%	4.2%	16.7%	6.5%	0.0%	3.7%	0.0%	0.0%	3.8%	3.7%	3.7%
2007	1.6%	0.8%	1.8%	1.4%	0.8%	0.7%	2.4%	0.0%	1.7%	0.0%	1.4%	1.7%	3.3%	1.1%	0.3%	10.0%	2.0%	0.0%	9.1%	2.5%	0.0%	0.4%	0.0%	4.4%	3.0%	1.1%	3.5%	2.4%	1.5%	1.6%	1.1%	2.0%	3.4%	8.6%	9.9%	5.4%	1.1%	0.0%	0.0%	0.0%		2.2%
TOTAL	3.2%	4.1%	7.4%	3.7%	6.0%	2.4%	5.5%	6.9%	4.3%	11.7%	4.1%	4.8%	6.4%	15.2%	4.1%	8.8%	8.7%	2.7%	20.7%	6.8%	3.6%	3.9%	12.5%	15.6%	8.6%	4.7%	8.4%	9.1%	4.7%	8.1%	3.7%	6.7%	8.7%	13.7%	16.9%	13.4%	5.2%	1.4%	5.7%	2.6%	6.5%	7.1%

Test and Repair Stations (300+) are listed in "Illinois Test and Repair 2010"

## Illinois Test and Repair Stations - 2011 Chicago

City	Station #	Street Address	ST	Zip	Active Date	Date Removed
SCHAUMBURG	300	811A West Higgins Road	IL	60195	5/23/2008	NA
MOUNT PROSPECT	303	2094 South Elmhurst Road	IL	60056	6/10/2008	NA
ADDISON	305	716 West Lake Street	IL	60101	5/7/2008	NA
DOWNERS GROVE	306	815 Ogden Avenue	IL	60515	5/22/2008	NA
AURORA	307	1301 North Lake Street	IL	60506	6/12/2008	NA
WESTCHESTER	308	10139 Roosevelt Road	IL	60154	6/17/2008	NA
NAPERVILLE	309	1032 East Ogden Avenue	IL	60563	6/4/2008	NA
PALOS HEIGHTS	311	12827 South Harlem	IL	60463	5/22/2008	NA
LEMONT	313	12775 Main Street	IL	60439	6/17/2008	NA
MIDLOTHIAN	317	4458 West 147th Street	IL	60445	6/13/2008	NA
NORTHBROOK	318	3402 Milwaukee Avenue	IL	60062	6/6/2008	NA
WESTMONT	326	6135 South Cass Avenue	IL	60559	5/17/2008	NA
SOUTH HOLLAND	330	35 East 162nd Street	IL	60473	5/28/2008	NA
OAK LAWN	335	9740 Southwest Hwy.	IL	60453	6/12/2008	NA
DES PLAINES	338	9401 Golf Road	IL	60016	6/11/2008	NA
LOCKPORT	340	20712 Gaskin Drive	IL	60441	7/6/2009	NA
MUNDELEIN	342	313 Townline Road	IL	60060	3/11/2010	NA
CARPENTERSVILLE	343	80 Kennedy Drive	IL	60110	10/18/2011	NA
LAKE VILLA	344	875 Grand Ave	IL	60046	1/6/2012	NA
CHICAGO	401	2737 N Central Ave	IL	60639	6/10/2009	NA
CHICAGO	402	3244 W Irving Park	IL	60618	6/10/2009	NA
LANSING	404	17065 Torrence Ave	IL	60438	6/10/2009	NA
BERWYN	406	6420 Ogden Avenue	IL	60402	3/26/2010	NA
NORTH AURORA	408	202 Genessis Drive	IL	60542	7/15/2010	NA
McHENRY	409	4705 W. Elm Street	IL	60050	12/1/2010	NA
HANOVER PARK	412	1655 Irving Park Road	IL	60133	12/1/2010	NA
CARPENTERSVILLE	413	8000 Binnie Road	IL	60110	12/2/2010	NA
OAK PARK	414	700 Madison Street	IL	60302	9/20/2011	NA
BLUE ISLAND	415	2260 W. 127th Street	IL	60406	9/20/2011	NA
CHICAGO/STONY ISLAND	416	7424 S. Stony Island	IL	60649	9/20/2011	NA
CHICAGO/CICERO	417	7743 S. Cicero	IL	60652	9/20/2011	NA
HANOVER PARK	601	1804 W. Army Trial Road	IL	60133	10/14/2011	NA
WEST CHICAGO	602	130 W. Roosevelt Road	IL	60185	10/26/2011	NA
COUNTRYSIDE	603	5815 S. Lagrange Road	IL	60525	11/2/2011	NA

NO LONGER IN THE PRO	GRAM					
City	Station #	Street Address	ST	Zip	Active Date	Date Removed
ROUND LAKE BEACH	323	300 West Rollins Road	IL	60073	6/18/2008	12/21/2011
CHICAGO	325	10716 South Western Avenue	IL	60643	5/17/2008	3/4/2011

#### Illinois Test and Repair Stations - 2011 Metro East

City	Station #	Street Address	ST	Zip	Active Date	Date Removed
COLLINSVILLE	322	411 Belt Line Road	IL	62234	6/4/2008	NA
ALTON	336	2701 Washington Avenue	IL	62002	6/5/2008	NA
EAST SAINT LOUIS	337	702 Martin Luther King Dr	IL	62201	6/5/2008	NA

NO LONGER IN THE PRO	GRAM					
City	Station #	Street Address	ST	Zip	Active Date	Date Removed
GRANITE CITY	328	2250 Madison Avenue	IL	62040	8/19/2008	10/17/2011
COLUMBIA	501	500 Admiral Weinel Blvd.	IL	62236	9/3/2010	9/30/2011

USEPA TEST DATA REPORT - 40 CFR 51.366(a)(5) - 2011 TESTS
\*AVERAGE CHANGE IN ALL VEHICLE EMISSIONS FOR HC AND CO AFTER REPAIRS
BETWEEN IM240 INITIAL FAIL AND RETEST (NEGATIVE INDICATES DECREASE AFTER REPAIR)

Not Applicable: Beginning February 1, 2007, the IM240 test was dropped from the Illinois Test Program.

## **APPENDIX B**

Quality Assurance Report and Quality Control Report for January through December 2011  Reference												
Reference to 51.366	Description	Stations	Lanes	Inspectors								
b	Quality Assurance Report											
b.1	The number of centralized inspection-only stations and lanes	17	67	NA								
b.1.i	Operating throughout the year	17	65	NA								
b.1.ii	Operating for only part of the year <sup>1</sup>	0	2	NA								
b.1	The number of decentralized inspection and repair stations and lanes	42	42	NA								
b.1.i	Operating throughout the year	27	27	NA								
b.1.ii	Operating for only part of the year <sup>2</sup>	15	15	NA								
b.2	The number of inspection stations and lanes operating throughout the year:											
b.2.i	Receiving overt performance audits in the year	56	103	NA								
b.2.ii	Not receiving overt performance audits in the year	0	0	NA								
b.2.iii	Receiving covert performance audits in the year	14	52	NA								
b.2.iv	Not receiving covert performance audits in the year	3	9	NA								
b.2.v	That have been shut down as a result of overt performance audits	0	0	NA								
b.3	The number of covert audits	14	128	NA								
b.3.i	Conducted with the vehicle set to fail per test type	14	128	NA								
b.3.ii	Conducted with the vehicle set to fail any combination of two or more test types	0	NA	NA								
b.3.iii	Resulting in a false pass per test type	0	NA	NA								
b.3.iv	Resulting in a false pass for any combination of two or more test types	0	NA	NA								
b.4	The number of inspectors and stations	-										
b.4.i	That were suspended, fired, or otherwise prohibited from testing for other causes <sup>3</sup>	0	NA	68								
b.4.ii	That were suspended, fired, or otherwise prohibited from testing as a result of covert audits <sup>4</sup>	0	NA	2								
b.4.iii	That received fines	0	NA	0								
b.5	The number of inspectors licensed or certified to conduct testing	NA	NA	173								
b.6	The number of hearings	10,1	147 (	173								
b.6.i	Held to consider adverse actions against inspectors and stations	0	NA	0								
b.6.ii	Resulting in adverse actions against inspectors and stations	0	NA	0								
b.7	The total amount collected in fines from inspectors and stations by type of violation	0	NA	0								
b.8	The total number of covert vehicles available for undercover audits over the year	0	2 Vehicles	_								
b.9	The total number of covert auditors available for undercover audits		2 Auditors									
С	Quality Control Report											
c.1	The number of inspection stations and lanes in use in the program	59	109	NA								
c.2	The number of stations and lanes that have received equipment audits	56	103	NA								
c.3	The number of stations that have failed equipment audits	11	NA	NA								
	The percentage of stations that have failed equipment audits	18.6%	NA	NA								
c.4	The Number of stations and lanes shut down as a result of equipment audits	0	13	NA								
	The Percentage of stations and lanes shut down as a result of equipment audits	0.0%	11.9%	NA								

<sup>&</sup>lt;sup>1</sup>Naperville Station operates two OBD-Only lanes for the months of April through July, 2011.

Decentralized Inspection and Repair facilities in Carpentersville, Oak Park, Blue Island, Chicago/Stony Island, Chicago/Cicero, Hanover park (2), West Chicago, and Countryside were added in 2011.

<sup>&</sup>lt;sup>2</sup>Decentralized Inspection and Repair facilities in Columbia, Round Lake, Chicago/Western Ave, Granite City, and Glen Ellyn were terminated at some point during 2011.

<sup>&</sup>lt;sup>3</sup>This count includes all voluntary and involuntary terminations of centralized station employees as well as ATATF IDs for facilities that left the program voluntarily or otherwise.

<sup>&</sup>lt;sup>4</sup>No inspectors were terminated base on covert audits, but one inspector was terminated for failure to follow test proceedures and one inspector was terminated for attempting a fraudulent test.

## **APPENDIX C**

04 41	Number of Equipmen	nt Audits	by Statio			Calenda	r Year	04 41
Station	Station Description	1	2	3	Lane #	5	6	Station
<b>#</b>	Waukegan	11	11	11	4	5	0	Total 33
3	Crystal Lake	11	11	11				33
4	Lincolnshire	7	7	11				25
7	Schaumburg	11	11	11	11			44
8	Elk Grove Village	6	6	10	- ''			22
11	Addison <sup>1</sup>	6	6	6	6			24
12	Skokie	6	6	6	10	10		38
13	Chicago: Forest Preserve	10	10	10	10	10		50
16	Chicago: Webster	6	6	6	6	10		24
22	Bedford Park	10	10	10	10	10	10	60
24	Naperville	10	10	10	10	6	6	52
26	Joliet	11	11	11	10			33
27	Markham	10	10	10	10	6	6	52
54	Tinley Park	6	6	6	1.0			18
29	Wood River	5	5					10
30	Pontoon Beach	5	5					10
53	Swansea	5	5					10
300	SCHAUMBURG	2						2
303	MOUNT PROSPECT	2						2
305	ADDISON	2						2
306	DOWNERS GROVE	2						2
307	AURORA	2						2
308	WESTCHESTER	2						2
309	NAPERVILLE	2						2
311	PALOS HEIGHTS	2						2
312	WAUKEGAN	2						2
313	LEMONT	2						2
314	WOODSTOCK	2						2
317	MIDLOTHIAN	2						2
318	NORTHBROOK	2						2
320	EVANSTON	2						2
322	COLLINSVILLE	2						2
323	ROUND LAKE BEACH	2						2
325	CHICAGO	2						2
326	WESTMONT	2						2
328	GRANITE CITY	2						2
329	BOLINGBROOK	2						2
330	SOUTH HOLLAND	2						2
331	BELLEVILLE	2						2
332	BELLEVILLE	2						2
333	O FALLON	2						2
334	AURORA	2						2
335	OAK LAWN	2						2
336	ALTON	2						2
337	EAST ST LOUIS	2						2
338	DES PLAINES	2						2
340	LOCKPORT	2						2
342	MUNDELEIN	2						2
401	CHICAGO	2						2
402	CHICAGO	2						2
403	GLEN ELLYN	2						2
404	LANSING	2						2
405	ELGIN	2						2
406	BERWYN	2						2
408	NORTH AURORA	2						2
501	COLUMBIA	2						2
							Total	616

<sup>&</sup>lt;sup>1</sup>Addison lane 5 is development lane only.

## **APPENDIX D**

	Number of Equipme	ent Audit	Failures l			e - 2011 (	Calendar `		
Station #	Station Description		<u> </u>		ne #			Lane	Station
1	Waukegan	0	<b>2</b>	<b>3</b>	4	5	6	Total 0	Fail N
3	Crystal Lake	0	0	0				0	N
4	Lincolnshire	0	0	0				0	N
7	Schaumburg	1	0	0	0			1	Y
8	Elk Grove Village	0	0	0	0			0	N
11	Addison <sup>1</sup>	0	0	0	0			0	N
12	Skokie	1	0	0	0	0		1	Y
13	Chicago: Forest Preserve	0	0	0	2	1		3	Y
16	Chicago: Webster	0	0	0	0			0	N
22	Bedford Park	0	0	0	0	0	0	0	N
24	Naperville	0	0	0	0	0	0	0	N
26	Joliet	0	1	0			Ŭ	1	Y
27	Markham	0	0	1	0	0	0	1	Y
54	Tinley Park	0	0	0				0	N
29	Wood River	0	0					0	N
30	Pontoon Beach	0	0					0	N
53	Swansea	1	0					1	Y
300	SCHAUMBURG	0						0	N
303	MOUNT PROSPECT	1 1						1	Y
305	ADDISON	0						0	N
306	DOWNERS GROVE	1						1	Y
307	AURORA	0						0	N
308	WESTCHESTER	1 1						1	Y
309	NAPERVILLE	0						0	N
311	PALOS HEIGHTS	0						0	N
312	WAUKEGAN	0						0	N
313	LEMONT	0						0	N
314	WOODSTOCK	0						0	N
317	MIDLOTHIAN	0						0	N
318	NORTHBROOK	0						0	N
320	EVANSTON	0						0	N
322	COLLINSVILLE	0						0	N
323	ROUND LAKE BEACH	0						0	N
325	CHICAGO	0						0	N
326	WESTMONT	0						0	N
328	GRANITE CITY	0						0	N
329	BOLINGBROOK	0						0	N
330	SOUTH HOLLAND	0						0	N
331	BELLEVILLE	0						0	N
332	BELLEVILLE	0						0	N
333	O FALLON	0						0	N
334	AURORA	0						0	N
335	OAK LAWN	0						0	N
336	ALTON	0						0	N
337	EAST ST LOUIS	0						0	N
338	DES PLAINES	1						1	Y
340	LOCKPORT	0						0	N
342	MUNDELEIN	0						0	N
401	CHICAGO	0						0	N
402	CHICAGO	0						0	N
403	GLEN ELLYN	1						1	Υ
404	LANSING	0						0	N
405	ELGIN	0						0	N
406	BERWYN	0						0	N
408	NORTH AURORA	0						0	N
501	COLUMBIA	0				l		0	N
			Total numb	er of lanes	failing an au	ıdit and wer	e shutdown	13	11

<sup>&</sup>lt;sup>1</sup>Addison lane 5 is development lane only.